American Dynamics™

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Configuration and User Guide

VideoEdge® IP SpeedDome Camera
Version 1.0

Part Number 8200-2613-01 C0

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Warning

To Reduce Risk of electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

Do not expose this appliance to rain or moisture.
Do not install this product in hazardous areas where highly combustible or explosive products are stored or used.

The lightning flash/arrowhead symbol, within an equilateral triangle, alerts the user to the presence of a shock hazard within the product's enclosure.

IT E161302

Underwriters Laboratories Inc. ("UL") has not tested the performance or reliability of the security or signaling aspects of this product. UL has only tested for fire, shock or casualty hazards as outlined in the UL's Standard for Safety UL 60950-1. **UL Certification does not cover the performance or reliability of the security or signaling aspects of this product. UL makes no representations, warranties or certifications whatsoever regarding the performance or reliability of any security or signaling related functions of this product.**

Note to Camera System Installer - This reminder is provided to call the camera systems installer's attention to Section 820.93 of the National Electrical Code, ANSI/NFPA 70: 2005, which provide guidelines for proper grounding and, in particular, specify that the coaxial cable shield shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

This equipment has been tested and found to comply with the limits for a Class "A" digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

Changes or modifications not expressly approved by Sensormatic the party responsible for FCC compliance, could void the user's authority to operate the equipment.

Certified Limited Power Required. This installation should be made by a qualified service person and should conform to all local codes. For outdoor installations use liquid-tight conduit or liquid-tight pipe.

This class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Refer to the Configuration and User Guide contained on the CD for more information.

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Introduction

Overview

The VideoEdge® IP SpeedDome Camera (hereafter referred to as IP Dome) operates across an IP network, e.g. the Internet, a LAN or WAN. The video output from the camera is compressed and sent across the network using IP transport mechanisms. PTZ camera control outputs from IP-connected controllers will be passed to the dome control electronics, allowing complete functionality as existing domes at a remote location connected by any kind of IP network.

A built-in web server provides web pages to configure the domes and streams the video using a customer-selected set of protocols with a standardized transport stream. This will also support other metadata and audio as required. Emails and movie clips (avi) may be sent across the network in response to alarms. The IP Dome can operate as a stand alone camera on a network however it is intended to be integrated into sophisticated security solutions.

The IP Dome is available in four models:

- 35X PAL
- 35X NTSC
- 22X PAL
- 22X NTSC

The IP Dome can be used with a proprietary Network Video Recording device, for example the VideoEdge® NVR or Intellex IP.

The maximum number of streams currently supported is four. When using Intellex Direct Protocol (IDP) a maximum of two streams are supported, running ACC from the WebGUI or ACC from an network video recording device. When using Real Time Streaming Protocol (RTSP) a maximum of two streams are supported running MJPEG and MPEG4 or H.264.

Features

The following provides information on the features of the IP Dome.

ACC compression

Three quality levels (Super, Normal, and Extended Record) are available on the camera.

Two sensitivity levels (Normal and High) are available on the camera.

Frame Rates

CIF	NTSC	PAL
4CIF	30 IPS	25 IPS
2CIF	30 IPS	25 IPS
1CIF	30 IPS	25 IPS

Table 1-1 — Frame Rates

The IP Dome supports a maximum or 30/25 (NTSC/PAL) images per second per video channel at 4 CIF. Actual frame rates may be less due to high motion. Multiple Ethernet connections can limit the maximum available IPS rate per connection.

Resolutions

The following table displays the resolutions for NTSC and PAL

NTSC	PAL
QVGA (320 x 240)	QVGA (320 x 240)
1 CIF (352 x 240)	1 CIF (352 x 288)
HVGA (640 x 240)	HVGA (640 x 240)
2CIF (704 x 240)	2CIF (704 x 288)
VGA (640 x 480)	VGA (640 x 480)
4CIF (704 x 480)	4CIF (704 x 576)

Table 1-2 — Resolutions

Video loss detection

In the event of video loss, an alarm is generated. The alarm is automatically cleared when the video is restored.

Bandwidth Throttling

When bandwidth throttling is turned on, the camera will attempt to restrict the total bandwidth of all camera activity to within the specified limits by varying the quality of all video streams. When the limit is exceeded, for example, by sudden movement in the captured image, the quality of each codec is reduced by one unit, until the total bandwidth lies below the limit. When the camera detects that there is sufficient bandwidth available, for example, when the motion stops, it will increase the video quality by single steps.

This may continue until the total bandwidth reaches 85% of the upper limit, in order to prevent instability due to continuous throttling. The video quality cannot be increased beyond the original user configured quality.

The throttling is not carried out on any MJPEG codec if it is only being used for the alarm buffer, since this is not being streamed over the network.

When bandwidth throttling is turned off, all affected codecs' quality is restored to the original configured value.

Web Configuration

The IP Dome’s web configuration feature allows you to access the configuration and setting details for the camera. Depending on user access you can view Live video and control the camera through PTZ controls as well as changing the settings for the camera environment.

Installation

Detailed installation instructions can be found in the printed Quick Start Guide provided with the IP Dome.

The installation process is documented using a flowchart in the Quick Installation Guide provided with the IP Dome and is also found in this manual as the Installation Process.

For detailed installation instructions refer to Install and Detect the IP Dome.

Minimum System Requirements

Component	Minimum Requirement
Processor	1 GHz Intel Pentium 4 or Celeron processor or equivalent processor that supports streaming SIMD extensions (SSE)
Operating System	Windows XP Home Windows XP Professional Microsoft Vista
RAM	512MB
Monitor	800 × 600 resolution and capable of displaying 16-bit color
Video Card	AGP or PCI Express X8 graphics card with 64MB memory and DirectX 8.0 support
Browser	Microsoft Internet Explorer 6.x Microsoft Internet Explorer 7.x Microsoft Internet Explorer 8 (IE7Compatibility Mode must be enabled)
Network Card	Ethernet 10/100 NIC
Add-ons	QuickTime ActiveX JavaScript Adobe Reader
Miscellaneous	Mouse or other pointing device.

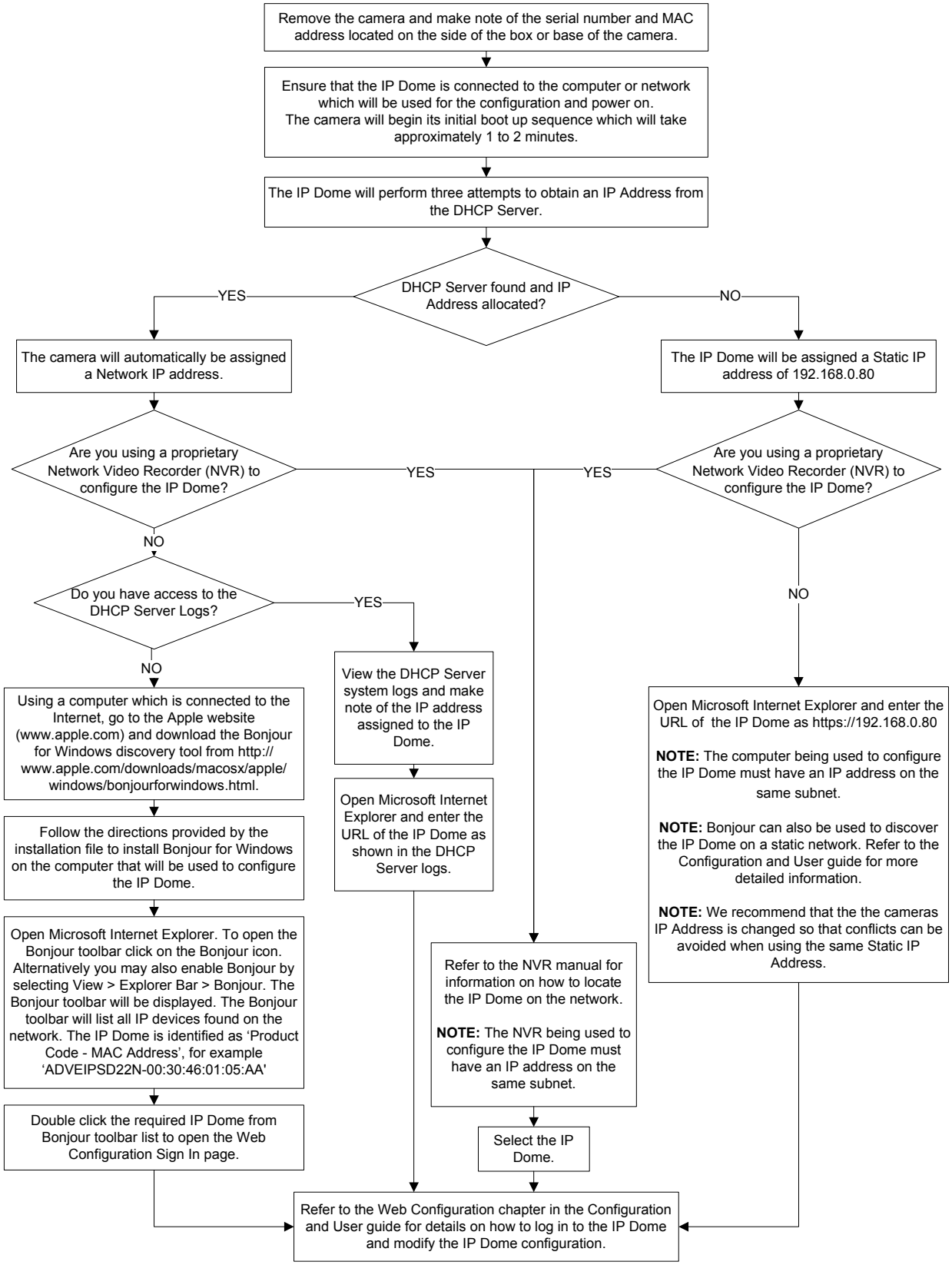
Mounts

The IP Dome can be installed using the following mounts:

- ROENDC
- RHIU2X2P
- RHOLW
- ADSDICM
- RHIUIBM
- RHIUCM
- RHOWCA
- ADVESDHRDCLG
- RHOPN
- RHOSW
- RHOWPA
- ADVESDBASE

Please contact your American Dynamics Sales Representative for more information.

Installation Process


Remove the camera and make note of the serial number and MAC address located on the side of the box or base of the camera.
Ensure that the IP Dome is connected to the computer or network which will be used for the configuration and power on. The camera will begin its initial boot up sequence which will take approximately 1 to 2 minutes.
The IP Dome will perform three attempts to obtain an IP Address from the DHCP Server.
DHCP Server found and IP Address allocated?
YES
NO
The camera will automatically be assigned a Network IP address.
The IP Dome will be assigned a Static IP address of 192.168.0.80
Are you using a proprietary Network Video Recorder (NVR) to configure the IP Dome?
YES
Are you using a proprietary Network Video Recorder (NVR) to configure the IP Dome?
YES
NO
Do you have access to the DHCP Server Logs?
YES
NO
NO
View the DHCP Server system logs and make note of the IP address assigned to the IP Dome.
Using a computer which is connected to the Internet, go to the Apple website (www.apple.com) and download the Bonjour for Windows discovery tool from http://www.apple.com/downloads/macosx/apple/windows/bonjourforwindows.html.
Open Microsoft Internet Explorer and enter the URL of the IP Dome as shown in the DHCP Server logs.
Open Microsoft Internet Explorer and enter the URL of the IP Dome as https://192.168.0.80
NOTE: The computer being used to configure the IP Dome must have an IP address on the same subnet.
NOTE: Bonjour can also be used to discover the IP Dome on a static network. Refer to the Configuration and User guide for more detailed information.
NOTE: We recommend that the the cameras IP Address is changed so that conflicts can be avoided when using the same Static IP Address.
Follow the directions provided by the installation file to install Bonjour for Windows on the computer that will be used to configure the IP Dome.
Refer to the NVR manual for information on how to locate the IP Dome on the network.
NOTE: The NVR being used to configure the IP Dome must have an IP address on the same subnet.
Open Microsoft Internet Explorer. To open the Bonjour toolbar click on the Bonjour icon. Alternatively you may also enable Bonjour by selecting View > Explorer Bar > Bonjour. The Bonjour toolbar will be displayed. The Bonjour toolbar will list all IP devices found on the network. The IP Dome is identified as 'Product Code - MAC Address', for example 'ADVEIPSD22N-00:30:46:01:05:AA'
Select the IP Dome.
Double click the required IP Dome from Bonjour toolbar list to open the Web Configuration Sign In page.
Refer to the Web Configuration chapter in the Configuration and User guide for details on how to log in to the IP Dome and modify the IP Dome configuration.

Install and Detect the IP Dome

The following provides detailed information for installing and accessing the IP Dome.

Installation using DHCP and Bonjour for Windows

The following provides information for installing the IP Dome on your network using the Zeroconf service discovery protocol and Apple Inc.'s application discovery tool, called Bonjour.

Bonjour, enables automatic discovery of devices on IP networks and is the recommended method for installation and detection of the IP Dome on the network.

Note

A known limitation of Bonjour for Windows is that it is not always able to maintain an up-to-date list of IP devices. If Bonjour fails to connect to an IP Dome after the IP Address has been changed, please restart Microsoft Internet Explorer and re-select the IP Dome in the Bonjour toolbar.

Procedure 2-1 Installing the IP Dome using Bonjour for Windows

1 Using the Quick Start Guide install and connect the IP Dome to the computer or network which will be used for the configuration and power on.

The camera will begin its initial boot up sequence which will take approximately 1 to 2 minutes.

2 When using a DHCP Server the IP Dome will automatically be assigned a Network IP Address.

3 Using a computer which is connected to the Internet, go to the Apple website (www.apple.com) and download the Bonjour for Windows discovery tool from http://www.apple.com/downloads/macosx/apple/windows/bonjourforwindows.html.

4 Follow the directions provided by the installation file to install Bonjour for Windows on the computer that will be used to configure the IP Dome.

5 When the installation is complete, open Microsoft Internet Explorer. To open the Bonjour toolbar click on the Bonjour icon. Alternatively you may also enable Bonjour by selecting View > Explorer Bar > Bonjour.

6 The Bonjour toolbar will list all IP devices found on the network. The IP Dome is identified as 'Product Code - MAC Address' for example 'ADVEIPSD22N-00:30:46:01:05:AA', this can be seen in Figure 2-1 Bonjour displaying IP devices found on the network. Double click the required IP Dome from this list to open the Web Configuration pages.

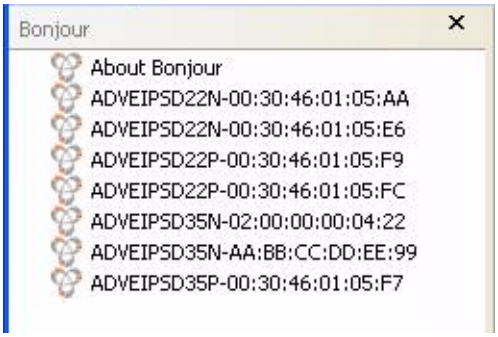


Figure 2-1 Bonjour displaying IP devices found on the network

7 Refer to the Web Configuration chapter for details on how to log in to the IP Dome and modify the configuration.

Procedure 2-2 Installing the IP Dome using DHCP Server Logs

1 Using the Quick Start Guide install and connect the IP Dome to the computer or network which will be used for the configuration and power on.

The camera will begin its initial boot up sequence which will take approximately 1 to 2 minutes.

2 When using a DHCP Server the IP Dome will automatically be assigned a Network IP Address.

3 View the DHCP Server system logs and make note of the IP address assigned to the IP Dome.

4 Open Microsoft Internet Explorer and enter the URL of the IP Dome as shown in the DHCP Server log.

Note

The computer being used to configure the IP Dome must have an IP address on the same subnet.

5 Refer to the Web Configuration chapter for details on how to log in to the IP Dome and modify the configuration.

Installation without a DCHP Server using a Static IP Address

The following provides information for installing the IP Dome on your network when no DHCP Server is available. In this situation the IP Dome will be assigned a Static IP Address.

Note

We recommend that once you are logged into the Web Configuration pages you change the Static IP Address of the camera so that conflicts can be avoided when using the same Static IP Address to setup additional cameras. Refer to IP Address Configuration for information on changing the IP address of the IP Dome.

Procedure 2-3 Installing the IP Dome when a DHCP Server is not available

1 Using the Quick Start Guide install and connect the IP Dome to the computer or network which will be used for the configuration and power on.

The camera will begin its initial boot up sequence which will take approximately 1 to 2 minutes.

2 The IP Dome will attempt to obtain an IP Address from the DHCP Server. When no DHCP Server is available the IP Dome will be assigned a Static IP address of 192.168.0.80.

3 Open Microsoft Internet Explorer and enter the URL of the IP Dome as https://192.168.0.80

Note

The computer being used to configure the IP Dome must have an IP address on the same subnet.

Note

Bonjour for Windows can also be used to discover the IP Dome when using a Static IP Address. Refer to Procedure 2-1 Installing the IP Dome using Bonjour for Windows and begin at Step 3.

4 Refer to the Web Configuration chapter for details on how to log in to the IP Dome and modify the configuration.

ActiveX Installation

When using Internet Explorer to access the IP Dome the browser may need to download and install selected ActixeX plug-ins.

The web browser uses the following ActiveX controls:

- Sensormatic Electronics Corporation - to display live video and enable privacy zones.
- Apple Quick Time - to enable audio.

Depending on your browser security settings you may see a message displayed in the information bar prompting you to proceed with an automatic installation. The highlighted information bar can be seen in Figure 2-2 Install ActiveX Control.

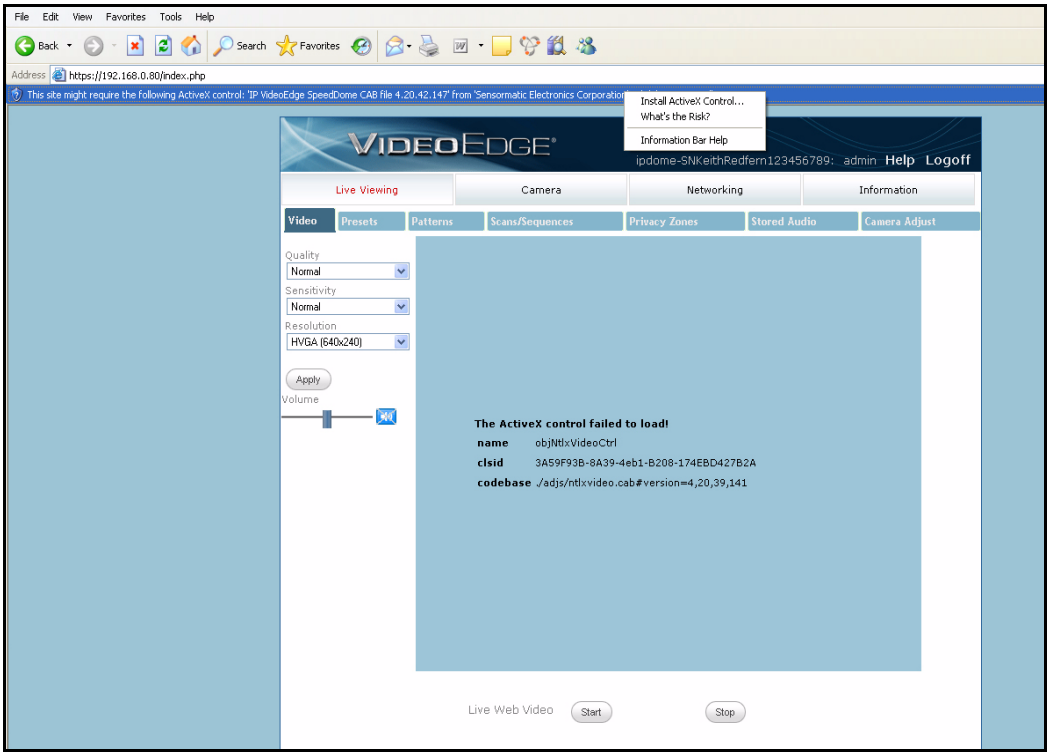


Figure 2-2 Install ActiveX Control

Right-click the information bar and select “Install ActiveX Control” the ActiveX plug-in will be installed.

Web Configuration

This section details how to configure the IP Dome using the built-in Web Configuration feature. Depending on user access you can view Live video and control the camera through PTZ controls as well as changing the settings for the camera environment.

Some items supplement similar features that may be available through your controller.

Note

To view the Live Web Video pane the latest versions of JavaScript, ActiveX and QuickTime must be installed and enabled on the computer running the browser session.

Note

Adobe Reader must be installed to view the online help.

Note

Web Configuration sessions timeout after a period of inactivity.

Note

Only users with administrative rights can access all the areas of the Web Configuration pages.

Log in to the IP Dome

Procedure 3-4 Logging in to the IP Dome

1 Refer to the Installation chapter for details on how to connect to the IP Dome on your network or computer.

2 When the IP Dome is selected Figure 3-1 the IP Dome Sign In page will be displayed.

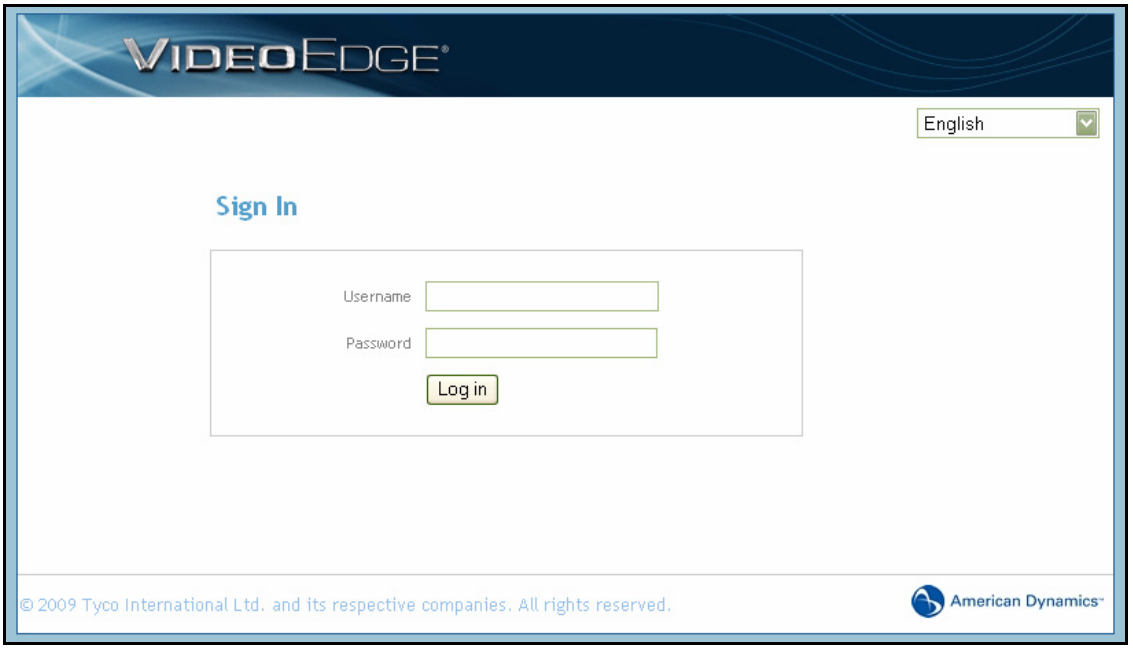


Figure 3-1 Sign in page

3 Select your preferred language from the drop-down menu in the right hand corner. The sign in page will be updated to display the selected language.

4 Enter the appropriate user name and password, then select the **Log in** button.

Depending on the access rights of the user, there may be specific camera functions that are unavailable. All camera functions are described on the following pages.

Note

The default username is **admin** and the default password is **admin**. To maintain security we recommend that the password on the admin account is changed, refer to Procedure 7-60 Changing an existing password for further information.

User Accounts

There are three types of user account that can be used to access the camera functions these are administrator, recorder and user.

- Refer to Procedure 6-36 Add a User for information on creating user accounts.
- Refer to Appendix 10: User Account Privileges which provides an overview of user accounts.

Note

The default user accounts for ‘admin’ and ‘recorder’ cannot be deleted. To maintain security we recommend that the password on these accounts are changed, refer to Procedure 7-60 Changing an existing password for further information.

Administrator

When an Administrator has logged in Figure 3-2 the Live Viewing screen will be displayed. An ‘admin’ account has full access to all of the cameras functions and information. The default

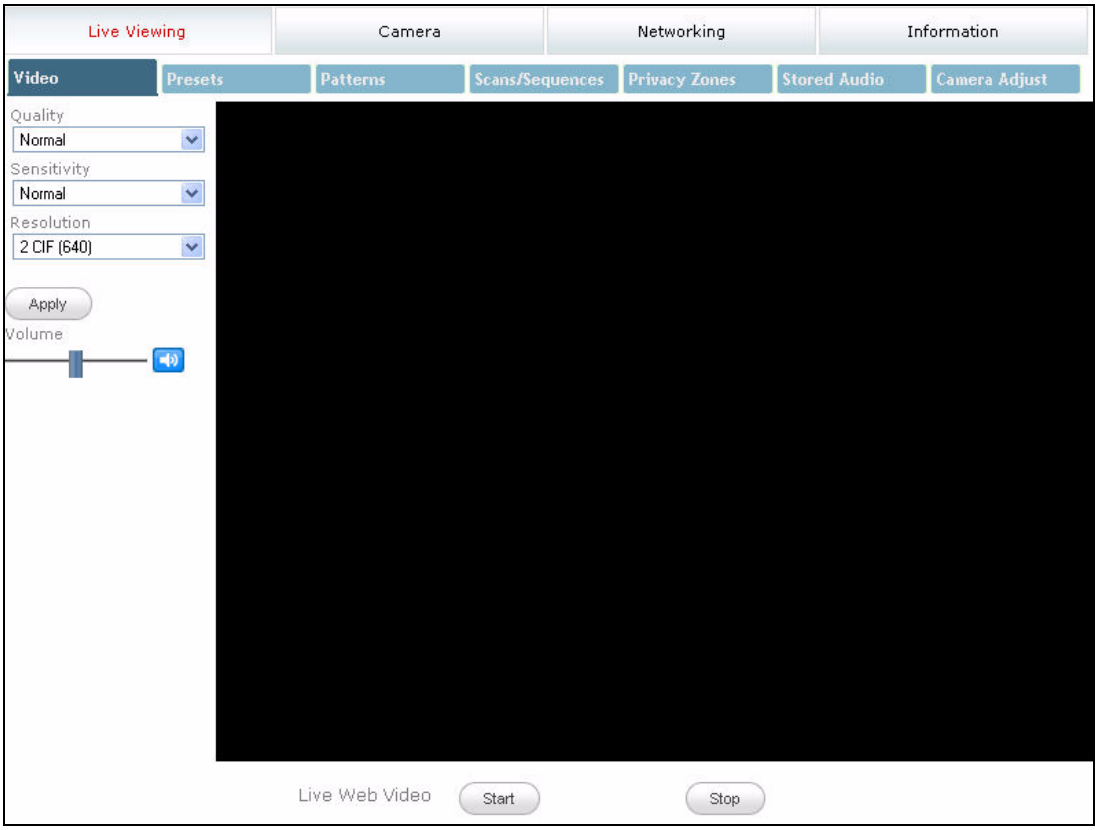


Figure 3-2 Live Viewing Screen

The options available to the Administrator are:

- Live Viewing - allows access to live video and camera controls. It also allows the configuration of video, presets, patterns, scans/sequences, privacy zones, audio and camera settings.
- Camera - allows configuration of the PTZ functionality, overlay settings, areas within the field of view, alarms, sequences, scheduled tasks, video settings and further audio.
- Networking - allows configuration of camera date and time, TCP/IP, user rights, SMTP, FTP, firewall, general maintenance and advanced settings.
- Information - provides information on the camera model, PTZ statistics, environmental readings, system log, boot log, current faults and provides a password changing function.
- Help - opens a window with help information.
- Logoff - exit the application.

Recorder

When a Recorder user has logged inFigure 3-3 the Live Viewing screen will be displayed. A ‘recorder’ account has limited access to the camera functions and information.

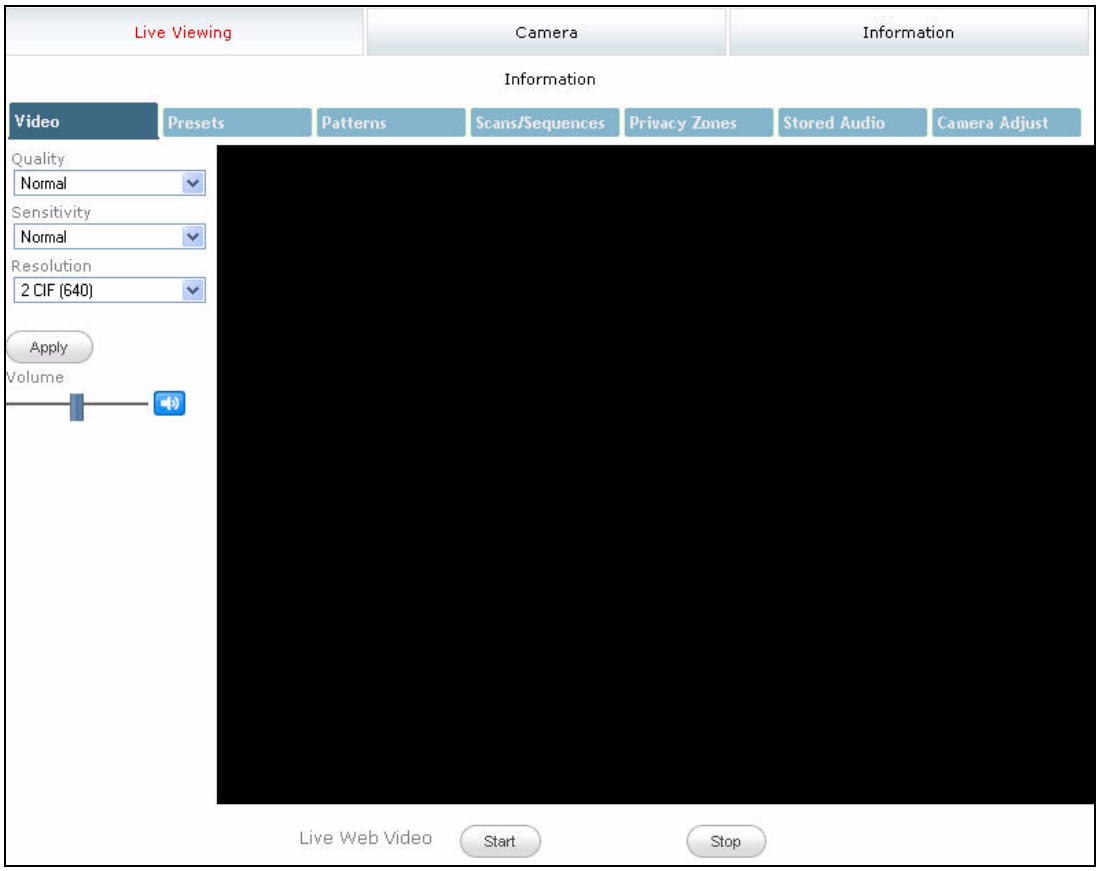


Figure 3-3 Live Viewing Logged in as Recorder

The options available to the Recorder are:

- Live Viewing - allows access to live video and camera controls. It also allows the configuration of video, presets, patterns, scans/sequences, privacy zones, audio and camera settings.
- Camera - allows configuration of the PTZ functionality and sequences.
- Information - provides information on the camera model, PTZ statistics, environmental readings, current faults and provides a password changing function.
- Help - opens a window with help information.
- Logoff - exit the application.

User

When a User user has logged in Figure 3-4 the Live Viewing screen will be displayed. A ‘user’ account has limited access to the camera functions and information.

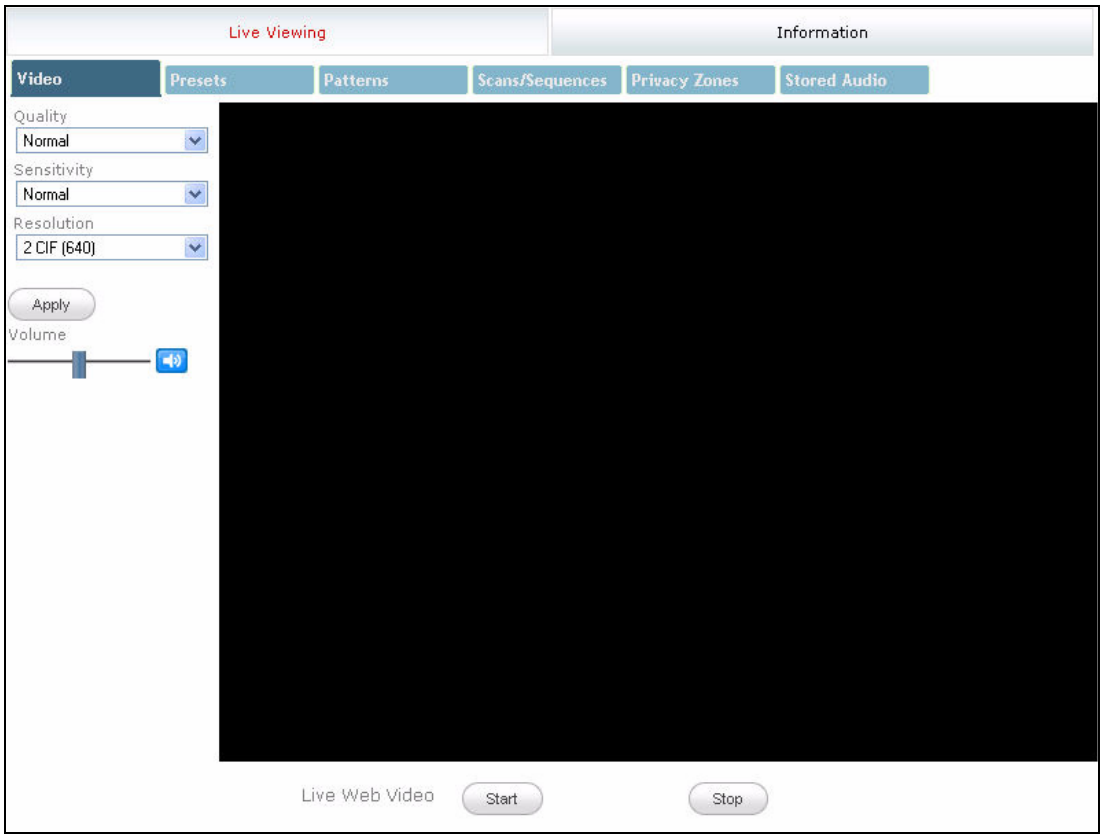


Figure 3-4 Live Viewing Logged in as User

The options available to the user are:

- Live Viewing - allows access to live video and camera controls. Also allows the selection of presets, patterns, scans/sequences, audio and privacy zones.
- Information - provides data on the camera model and provides a password changing function.
- Help - opens a window with help information.
- Logoff - exit the application.

Checking Camera Feed using the Live Viewing function

The Live Viewing page provides a simple way to test the video inputs from the IP Dome. This Live Viewing page is not intended to be the primary way of viewing the video on the IP Dome; this should be performed using the Network Video Recording device.

The Live Web Video is accessible to any authorized user.

Procedure 3-5 Starting the Live Web Video feed

Note

To view the Live Web Video pane the latest versions of JavaScript, Active X and QuickTime must be installed and enabled on the computer running the browser session.

1 Log in to the IP Dome using an appropriate user name and password, for more details refer to Procedure 3-4 Logging in to the IP Dome. Figure 3-2 the Live Viewing page is displayed.

2 Select the Live Web Video **Start** and **Stop** button, located to start and stop the live video feed. The live web Video pane will display the video feed.

Note

Displaying live video may affect other video streams.

Procedure 3-6 Checking camera feed using the Live Viewing function

Note

Changing the Quality, Sensitivity, Resolution or Volume settings only affects what is being displayed on the Live Viewing page. Changing these settings does not affect the video being sent by the IP Dome to the Network Video Recording device.

Note

When Apply is selected it may take a few seconds to update the Live Web Video feed.

1 Log in to the IP Dome using an appropriate user name and password, refer to Procedure 3-4 Logging in to the IP Dome. Figure 3-2 the Live Viewing page is displayed.

2 Follow Procedure 3-5 Starting the Live Web Video feed.

3 Select the Quality setting from the drop-down menu and select the **Apply** button.

- **Extended**
- **Normal**
- **Super**

The default Quality is set to Normal.

4 Select the Sensitivity from the drop-down menu and select the **Apply** button.

- **Normal**
- **High**

The default Sensitivity is set to Normal.

5 Select the Resolution from the drop-down menu and select the **Apply** button.

- **1CIF (320)**
- **1CIF (352)**
- **2CIF (640)**

- **2CIF (704)**
- **4CIF (640)**
- **4CIF (704)**

The default Resolution is set to 2CIF (640).

6 To adjust the volume use the slider, or the mute button. The slider bar can be moved left or right using the mouse or for fine adjustments using the left and right arrow keys on the PC keyboard. The default volume is set to 50 and the mute button will be enabled.

7 Select a different tab to exit the screen, or **Logoff** to exit the application.

Controlling dome cameras on the Live Viewing page

The IP Dome camera may be controlled using the on-screen controls in the live web Video pane.

Dome Camera Controls

The following information details the various controls that are available for the on-screen dome control.

Note

It is possible for two users to access Live Viewing at the same time however only one user may control the camera at any time. If a new user opens a camera control session on the same camera using a different browser the original user will lose their camera control session.

The dome control symbol appears in the lower right hand corner.

Procedure 3-7 Controlling the camera via the Live Web Video pane

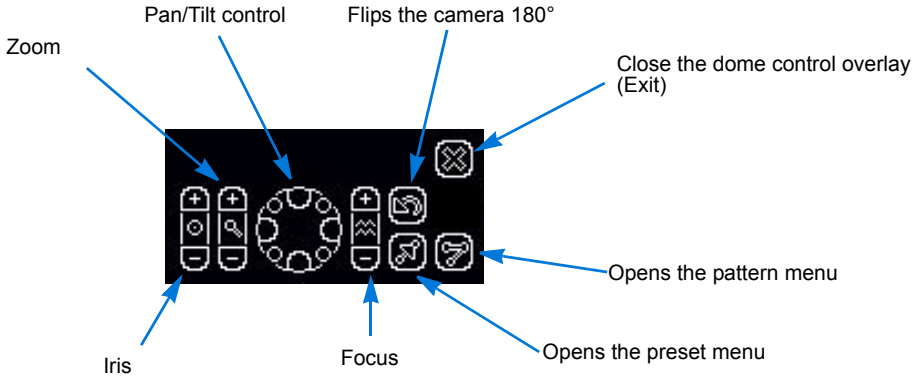
Note

Scheduled tasks, alarms and manual dome camera control will always begin when they are selected or scheduled to start. None of these camera actions have a priority over the other. If a camera action is in progress and a new action is selected or activated the previous action will stop before the new action is started.

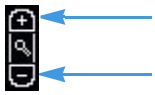
1 Follow Procedure 3-5 Starting the Live Web Video feed.

2 Select Dome Control in the Live Web Video pane.

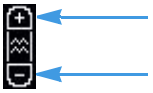
3 Select the camera control item on the overlay to activate the control.



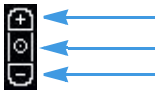
Zoom



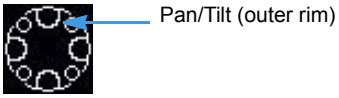
Focus



Iris

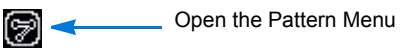


Pan/Tilt Movement



Presets

Patterns



4 Select Exit to close the camera control overlay.

Controlling the Pan-Tilt Control via Mouse

Controlling the camera using the mouse will allow you to move slowly which will provide maximum accuracy.

Procedure 3-8 Controlling Pan and Tilt via a mouse using the Live Web Video pane

1 Follow Procedure 3-5 Starting the Live Web Video feed.

2 Select Dome Control in the live web Video pane. The camera control overlay will be displayed.

3 Move the cursor over the center of the video pane. The Cursor Origin Mark appears as shown in Figure 3-5.

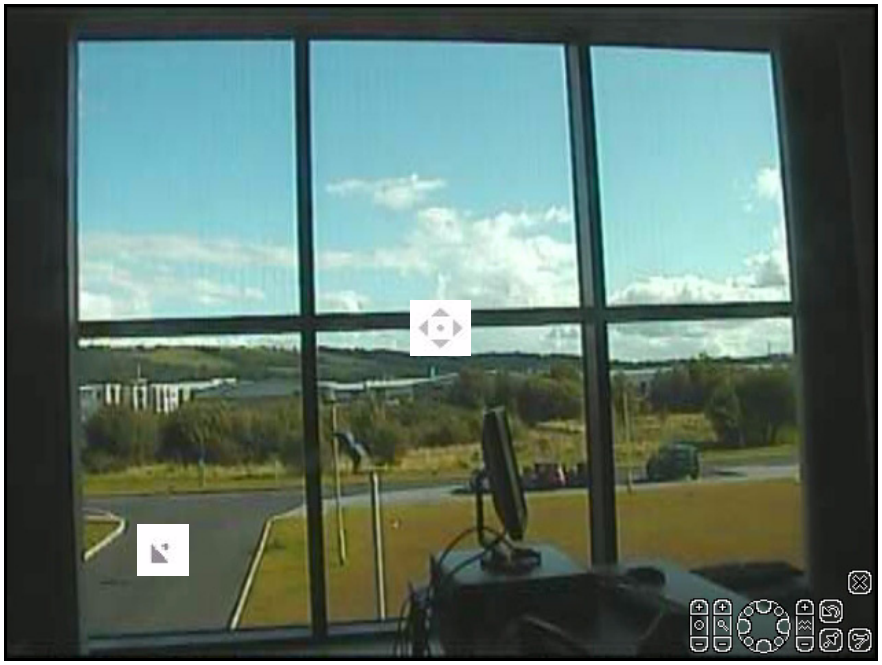


Figure 3-5 Live image with Cursor Origin Mark and Direction cursor displayed

4 Click and drag the cursor to set the direction and speed, then release.

- The camera's movement speed increases proportionally with the arrow's distance from the cursor origin mark.
- The camera's direction is relative to cursor origin mark.

5 Select Exit to close the camera control overlay.

Zoom via Mouse Scroll Wheel

Controlling the zoom function using the mouse

Procedure 3-9 Zooming via the mouse scroll wheel using the Live Web Video pane

1 Follow Procedure 3-5 Starting the Live Web Video feed.

2 Use Procedure 3-7 Controlling the camera via the Live Web Video pane or/and Procedure 3-8 Controlling Pan and Tilt via a mouse using the Live Web Video pane to locate the area you would like to zoom.

3 Point the camera at a target.

4 Scroll the mouse wheel upwards (zoom in) and downwards (zoom out).

5 Select Exit to close the camera control overlay.

Procedure 3-10 Selecting a Pattern via the Camera Control Overlay

Note

It is also possible to select a pattern using the Pattern menu, refer to Procedure 4-21 Selecting a Pattern for more information.

1 Follow Procedure 3-5 Starting the Live Web Video feed.

2 Select Dome Control in the Live Web Video pane. The camera control overlay will be displayed.

3 Select Pattern in the camera control overlay to open the pattern menu. The pattern menu will be displayed:

4 Select a pattern number from the drop-down menu.

5 Select to run the pattern.

The pattern will run continuously until interrupted by a camera command, pattern, scan or alarm.

6 Select Exit to close the pattern menu.

7 Select Exit to close the camera control overlay.

Procedure 3-11 Add a Pattern via the Camera Control Overlay

Note

For best results we recommend that you use the Pattern menu to define a new pattern, refer to Procedure 4-20 Adding a Pattern for more information.

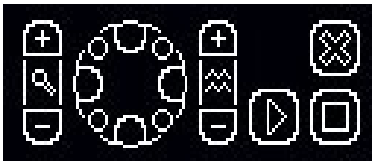
1 Follow Procedure 3-5 Starting the Live Web Video feed.

2 Select Dome Control in the Live Web Video pane. The camera control overlay will be displayed.

Click the dome icon, use the camera overlay controls to locate the pattern starting point. See Procedure 3-7 Controlling the camera via the Live Web Video pane and Procedure 3-8 Controlling Pan and Tilt via a mouse using the Live Web Video pane for further details.

3 Select Pattern in the camera control overlay to open the pattern menu. The pattern menu will be displayed:

4 Select a pattern slot number from the drop-down menu, the new pattern will be saved to this slot number. Select Define Pattern the pattern definition menu will be displayed:



Note

If the selected pattern slot number has been assigned to a pattern it will be replaced without warning. This also applies to any pattern that is associated with a Home Position, Alarm Action or Scheduled task. The original pattern will be replaced by the new pattern.

Note

The apple peel pattern as a default will be saved to pattern slot numbers 1 and 16. If these pattern slot numbers are selected when defining a pattern the apple peel pattern will be replaced by the new pattern. To restore the apple peel pattern you must follow Procedure 6-49 Restore Factory Defaults.

5 Select Start to begin programming the pattern. Use the camera control overlay to define the pattern's behavior.

Note

A pattern can contain a maximum of 97 steps with an unlimited duration.

Note

A diagonal pan or tilt move will use 4 steps.

6 The white progress bar provides a visual representation of the number of steps remaining in the pattern. As steps are added to the pattern this progress bar will decrease.

When the progress bar reaches the left side, no more steps will be saved for the pattern.

7 Select Stop to end the pattern recording. The Replace Pattern dialog will appear prompting you to confirm that the pattern should be saved. Select Yes to save or No to cancel.

The camera settings you have configured will be used for the pattern. Refresh the page.

8 Select Exit to close the pattern's definition menu.

9 To test the new pattern, select the pattern number from the drop-down menu and select .

The pattern will run continuously until interrupted by a camera command, pattern, scan or alarm.

10 Select Exit to close the Pattern menu.

11 Select Exit to close the Primary Camera Control menu.

Procedure 3-12 Selecting a Preset via the Camera Control Overlay

Note

It is also possible to select a preset using the Preset menu, refer to Procedure 4-16 Selecting a Preset for more information.

1 Follow Procedure 3-5 Starting the Live Web Video feed.

2 Select Dome Control in the Live Web Video pane. The camera control overlay will be displayed.

3 Select Preset in the camera control overlay to open the preset menu. The preset menu will be displayed:

4 Select a preset slot number from the drop-down menu.

5 Select to run the preset.

The preset will run continuously until interrupted by a camera command, pattern, scan or alarm.

6 Select Exit to close the preset menu.

7 Select Exit to close the camera control overlay.

Procedure 3-13 Defining a Preset via the Camera Control Overlay

Note

For best results we recommend that you use the Preset menu to add a new preset, refer to Procedure 4-15 Adding a Preset for more information.

1 Follow Procedure 3-5 Starting the Live Web Video feed.

2 Select Dome Control in the Live Web Video pane. The camera control overlay will be displayed.

Click the dome icon, use the camera overlay controls to locate the preset scene. See Procedure 3-7 Controlling the camera via the Live Web Video pane and Procedure 3-8 Controlling Pan and Tilt via a mouse using the Live Web Video pane for further details.

3 Select in the camera control overlay to open the preset menu. The preset menu will be displayed:

4 Select a preset slot number from the drop-down menu, the new preset will be saved to this slot number.

Note

If the selected preset slot number has been assigned to a preset it will be replaced without warning. This also applies to any preset that is associated with a Sequence, Home Position, Alarm Action or Scheduled task. The original preset will be replaced by the new preset.

5 Select Define Preset the Replace Preset dialog will appear prompting you to confirm that the preset should be saved. Select Yes to save or No to cancel.

The camera settings you have configured on the camera will be used for the preset. Refresh the page.

6 To test the new preset, select the preset number from the drop-down menu and select .

The preset will run continuously until interrupted by a camera command, pattern, scan or alarm.

7 Select to close the preset menu.

8 Select to close the camera control overlay.

Video

When Video is selected from the Live Viewing menu and Live Web Video has been started, (refer to Procedure 3-5 Starting the Live Web Video feed) Figure 4-6 the Video screen will be displayed.

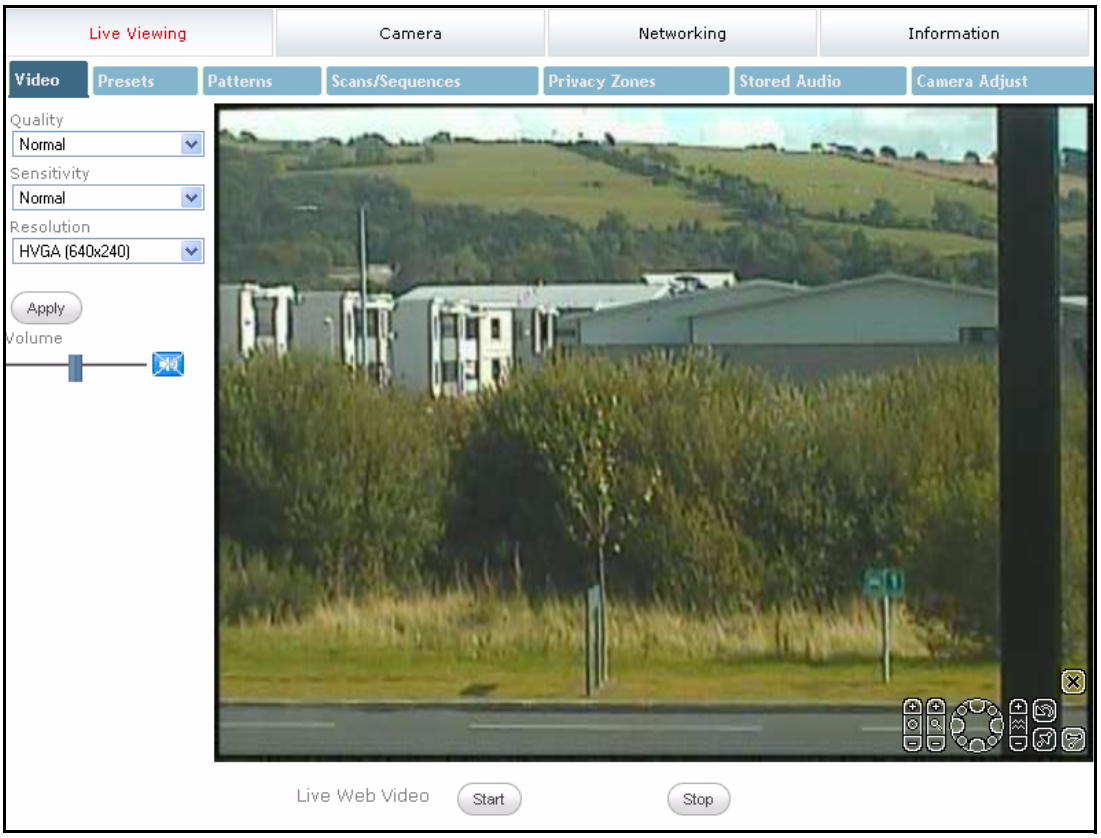


Figure 4-6 Video screen

Procedure 4-14 Configuring the Video settings

Note

Changing the Quality, Sensitivity, Resolution or Volume settings only affects what is being displayed on the Live Viewing page. Changing these settings does not affect the video being sent by the Network Video Recording device.

Note

When Apply is selected it may take a few seconds to update the Live Web Video feed.

1 Log in to the IP Dome using an appropriate user name and password, for more details refer to Procedure 3-4 Logging in to the IP Dome.

2 Select **Video** from the **Live Viewing** menu. Figure 4-6 the Video screen will be displayed.

3 Follow Procedure 3-5 Starting the Live Web Video feed.

4 Select the Quality setting from the drop-down menu and select the **Apply** button.

- **Extended**

- **Normal**
- **Super**

The default Quality is set to Normal.

5 Select the Sensitivity from the drop-down menu and select the **Apply** button.

- **Normal**
- **High**

The default Sensitivity is set to Normal.

6 Select the Resolution from the drop-down menu and select the **Apply** button.

When using PAL, the resolution options are:

- **QVGA (320 x 240)**
- **1 CIF (352 x 288)**
- **HVGA (640 x 240)**
- **2CIF (704 x 288)**
- **VGA (640 x 480)**
- **4CIF (704 x 576)**

The default PAL resolution is set to 2CIF (704 x 288).

When using NTSC, the resolution options are:

- **QVGA (320 x 240)**
- **1 CIF (352 x 240)**
- **HVGA (640 x 240)**
- **2CIF (704 x 240)**
- **VGA (640 x 480)**
- **4CIF (704 x 480)**

The default NTSC resolution is set to 2CIF (704 x 240).

7 To adjust the volume use the slider, or the mute button. The slider bar can be moved left or right using the mouse or for fine adjustments using the left and right arrow keys on the PC keyboard. The default volume is set to 50 and the mute button will be enabled.

8 Select a different tab to exit the screen, or **Logoff** to exit the application.

Presets

A Preset is a pre-positioned camera scene that you program for cameras installed with pan/tilt and motorized lens capability. Up to 96 presets can be programmed from the Live Viewing screen.

Procedure 4-15 Adding a Preset

Note

This procedure is the recommended method for adding a new preset, however It is also possible to add a preset using the camera overlay control, refer to Procedure 3-13 Defining a Preset via the Camera Control Overlay.

1 Follow Procedure 3-5 Starting the Live Web Video feed.

2 Make the necessary camera adjustments.

The following controls can be modified and saved as part of the preset. The pan, tilt and zoom can be accessed using Procedure 3-7 Controlling the camera via the Live Web Video pane. The remaining controls can be accessed via the Camera Adjust menu.

- Pan, Tilt and Zoom.
- Focus Mode and Iris Mode

Note

Additional controls can also be saved as part of the preset. Complete this procedure then refer to Procedure 4-17 Editing a Preset to add the additional controls.

3 Select **Presets** from the **Live Viewing** menu.

4 Select **Add Preset** from the Presets menu. Figure 4-7 the add Preset screen will be displayed.

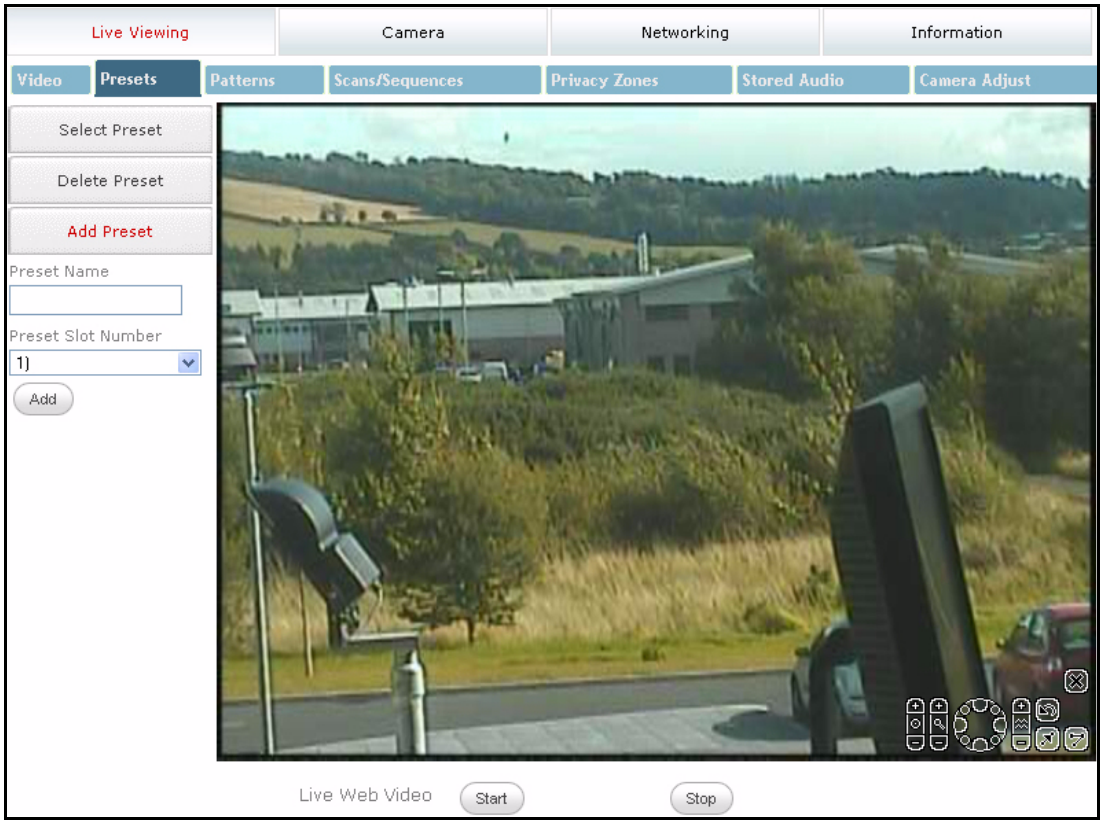


Figure 4-7 Add Preset screen

5 Enter the Preset Name in the text box.

6 Select a Preset Slot Number from the drop-down menu.

A free preset slot number will have the slot number displayed, for example, ‘12)’. If the slot number has been pre-defined, the slot number and preset name will be displayed, for example, ‘10) Main Entrance’.

If you select a preset slot number that has been pre-defined will be prompted to overwrite the existing preset. Select **OK** to continue or **Cancel** to select an alternative preset slot number.

7 Select the **Add** button. The camera settings you have configured on the camera will be used for the preset.

The preset will now appear on the **Select Preset** and **Delete Preset** drop-down menus.

Procedure 4-16 Selecting a Preset

Note

It is also possible to select a preset using the camera overlay control, refer to Procedure 3-12 Selecting a Preset via the Camera Control Overlay.

1 Follow Procedure 3-5 Starting the Live Web Video feed.

2 Select **Presets** from the Live **Viewing** menu.

3 Choose **Select Preset** from the Presets menu. Figure 4-8 the Select Preset section will be displayed.

Figure 4-8 Select Preset

4 Select the pre-defined preset from the drop-down menu.

5 Select the **Goto** button to activate the preset. The Live Web Video pane will update to display the selected preset.

The preset will run continuously until interrupted by a camera command, pattern, scan or alarm.

Procedure 4-17 Editing a Preset

1 Select **Presets** from the **Live Viewing** menu.

2 Choose **Select Preset** from the Presets menu. Figure 4-8 the Select Preset section will be displayed.

3 Select a pre-defined preset from the drop-down menu. Select the **Goto** button to activate the preset.

4 Make the necessary camera adjustments.

The following controls can be modified and saved as part of the preset. The pan, tilt and zoom can be accessed using Procedure 3-7 Controlling the camera via the Live Web Video pane. The remaining controls can be accessed via the Camera Adjust menu.

- Pan, Tilt and Zoom
- Focus Mode and Iris Mode
- Electronic Image Stabilization and Wide Dynamic Range
- White Balance
- Infrared Mode and Day Night Mode
- Shutter Limit and Gain
- Brightness, Contrast, Hue and Saturation

Select **Presets** from the **Live Viewing** menu when you have finished the camera adjustments.

5 Select the **Set** button when you have finished any modifications. You will be prompted to confirm the update.Select the **OK** button to confirm or the **Cancel** button to stop the update.

The camera settings you have configured on the camera will be used for the preset.

Using Preset as Home Position

The home position runs after a designated period of dome inactivity. Select a home position if you want to keep a specific area under surveillance whenever the dome is not moving.

Follow Procedure 5-6 Display Current Home Position to change the return time for the home position.

Procedure 4-18 Using a Preset as a Home Position

1 Select **Presets** from the **Live Viewing** menu.

2 Choose **Select Preset** from the Presets menu. Figure 4-8 the Select Preset section will be displayed.

3 Select a pre-defined preset from the drop-down menu.

4 Select the **Use as Home** button to set the selected preset as the camera home position.

Procedure 4-19 Delete a Preset

1 Select **Presets** from the **Live Viewing** menu.

2 Select **Delete Preset** from the Presets menu. Figure 4-8 the Delete Preset section will be displayed.

Figure 4-9 Delete Preset

3 Select a pre-defined preset from the drop-down menu.

Note

You cannot delete a preset while it is associated with another camera function. To remove the preset refer to the associated camera function, Editing a Sequence, Clear the Current Home Position, Configuring Alarm Actions and Editing a Scheduled Task.

4 Select the **Delete** button. You will be prompted to confirm the deletion. Select the **OK** button to confirm or the **Cancel** button to stop the deletion.

Patterns

A pattern is a series of pan, tilt, zoom and focus movements which can be saved to the dome. A maximum of 16 patterns can be programmed for the IP Dome each containing up to 97 steps with an unlimited duration.

Procedure 4-20 Adding a Pattern

Note

This procedure is the recommended method for adding a new pattern, however It is also possible to add a pattern using the camera overlay control, refer to Procedure 3-11 Add a Pattern via the Camera Control Overlay.

1 Follow Procedure 3-5 Starting the Live Web Video feed.

Click the dome icon, use the camera overlay controls to locate the pattern starting point. See Procedure 3-7 Controlling the camera via the Live Web Video pane and Procedure 3-8 Controlling Pan and Tilt via a mouse using the Live Web Video pane for further details.

2 Select **Patterns** from the **Live Viewing** menu.

3 Select **Add Pattern** from the Patterns menu. Figure 4-10 the Add Pattern screen will be displayed.

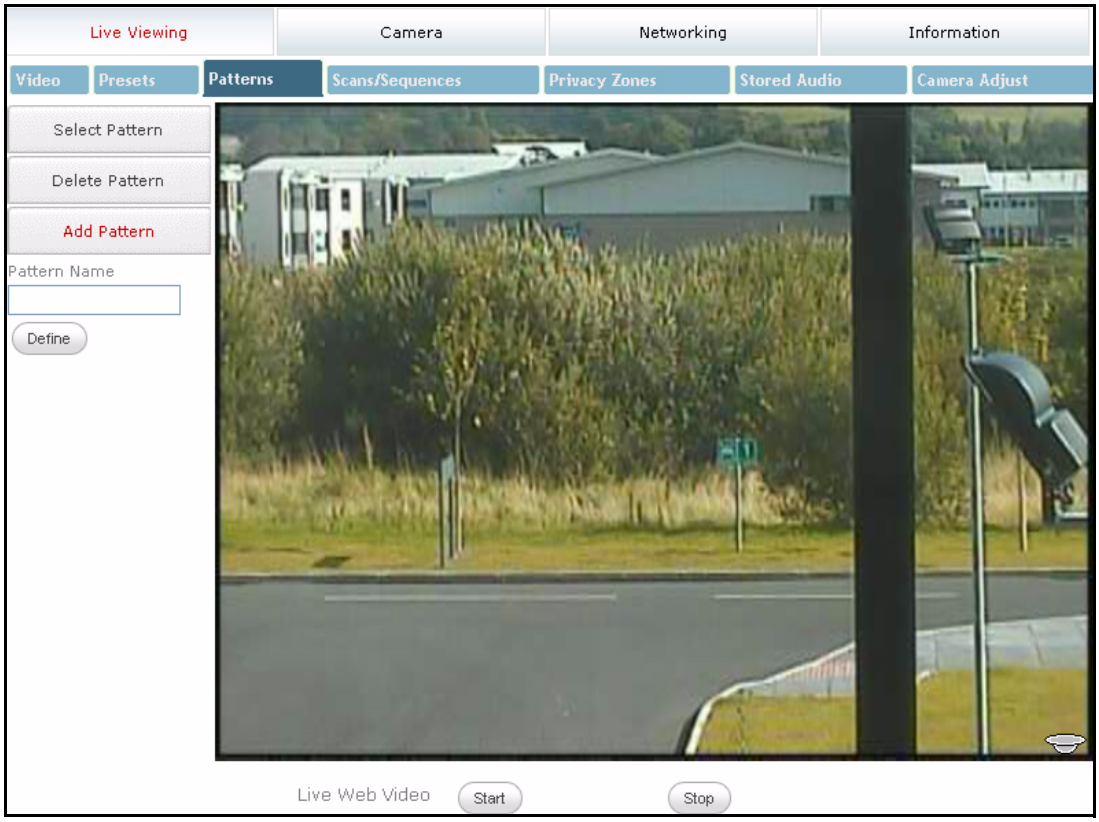


Figure 4-10 Add Pattern screen

4 Enter the Pattern Name in the text box and select the **Define** button. The Add Pattern section will update with an **Add** and **Cancel** button. See Figure 4-11.

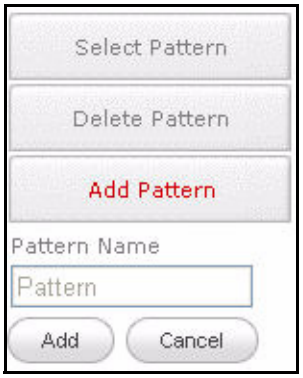


Figure 4-11 Add Pattern with active Add and Cancel button

Use the camera overlay controls to configure the required pattern settings. See Procedure 3-7 Controlling the camera via the Live Web Video pane and Procedure 3-8 Controlling Pan and Tilt via a mouse using the Live Web Video pane for further details.

Note

A pattern can contain a maximum of 97 steps with an unlimited duration.

Note

A diagonal pan or tilt move will use 4 steps.

The following controls can also be modified and saved as part of the pattern. These can be accessed via the Camera Adjust menu.

- Focus Mode
- Iris Mode

5 The white progress bar provides a visual representation of the number of steps remaining in the pattern, this can be seen in Figure 4-12 Add Pattern with progress bar displayed. As steps are added to the pattern this progress bar will decrease.

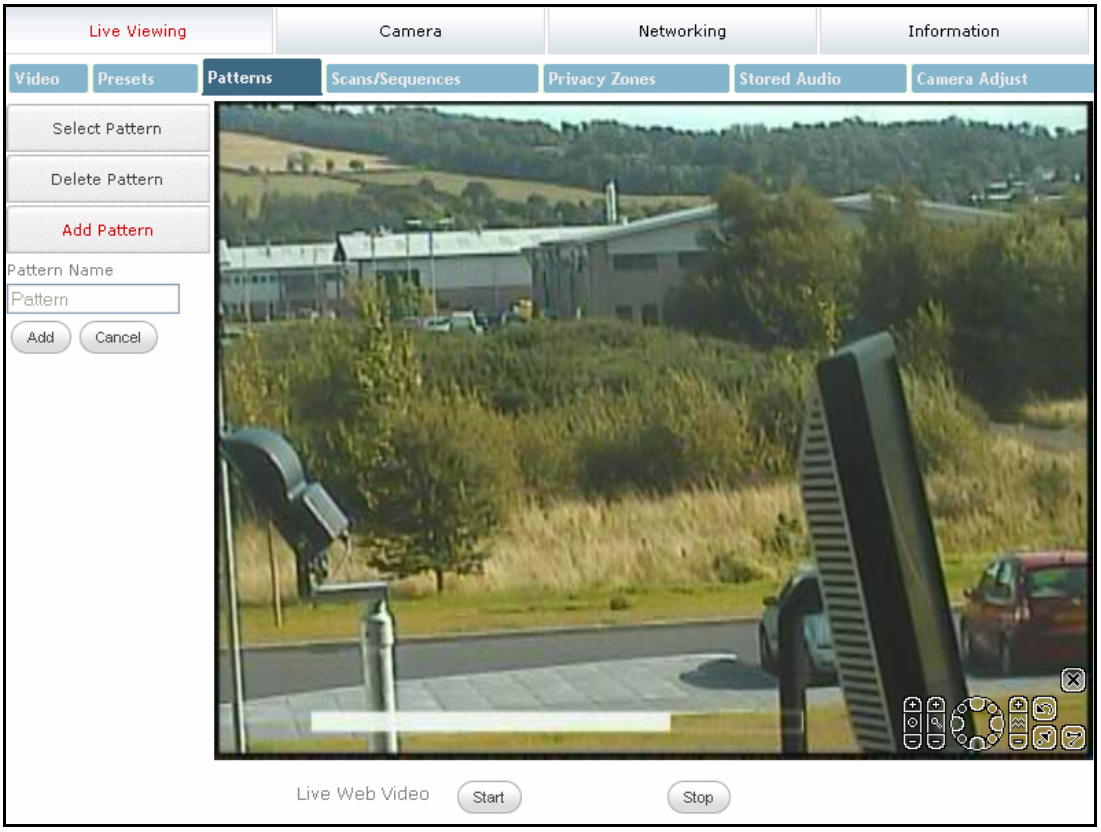


Figure 4-12 Add Pattern with progress bar displayed

When the progress bar reaches the left side, no more steps will be saved for the pattern.

6 Select the **Add** button when you have finished. The camera settings you have configured will be used for the pattern. Select the **Cancel** button to cancel the configuration.

The pattern will now appear on the **Select Pattern** and **Delete Pattern** drop-down menus.

Procedure 4-21 Selecting a Pattern

Note

It is also possible to select a pattern using the camera overlay control, refer to Procedure 3-10 Selecting a Pattern via the Camera Control Overlay.

1 Select **Patterns** from the **Live Viewing** menu.

2 Choose **Select Pattern** from the Patterns menu. Figure 4-8 the Select Pattern section will be displayed.

Figure 4-13 Select Pattern

3 Select the pre-defined pattern from the drop-down menu.

Note

Apple Peel is a predefined pattern stored on the camera by default. This pattern slowly tilts and rotates the camera through 360 degrees starting at the ceiling line. When the IP Dome reaches the lowest tilt point it will perform three revolutions. The IP Dome will then follow the tilt and rotate pattern to return to the starting point. The pattern will run continuously until interrupted by a camera command, preset, scan or alarm.

4 Select the **Start** button to activate the pattern. The Live Web Video pane will update to display the selected pattern.

The pattern will run continuously until interrupted by a camera command, preset, scan or alarm.

Using Pattern as Home Position

The home position runs after a designated period of dome inactivity. Select a home position if you want to keep a specific area under surveillance whenever the dome is not moving.

Follow Procedure 5-6 Display Current Home Position to change the return time for the home position.

Procedure 4-22 Using a Pattern as a Home Position

1 Select **Patterns** from the **Live Viewing** menu.

2 Choose **Select Pattern** from the Patterns menu. Figure 4-8 the Select Pattern section will be displayed.

3 Select a pre-defined pattern from the drop-down menu.

4 Select the **Use as Home** button to set the selected pattern as the camera home position.

Procedure 4-23 Delete a Pattern

1 Select **Patterns** from the **Live Viewing** menu.

2 Select **Delete Pattern** from the Patterns menu button. Figure 4-14 the Delete Pattern section will be displayed.

Figure 4-14 Delete Pattern

3 Select a pre-defined pattern from the drop-down menu.

Note

You cannot delete a pattern while it is associated with another camera function. To remove the pattern refer to the associated camera function, Clear the Current Home Position, Configuring Alarm Actions and Editing a Scheduled Task.

4 Select the **Delete** button. You will be prompted to confirm the deletion. Select the **OK** button to confirm or the **Cancel** button to stop the deletion.

Scans/Sequences

The following section provides information on configuring Scans and Sequences for the IP Dome.

Scans

A scan allows you to program left and right scan limits to automate your surveillance activities. Once these scan limits are programmed you can choose to run a smooth scan, stepped scan, or random scan. When active, the scan repeats until interrupted by a camera command, preset, pattern or alarm.

Procedure 4-24 Setting Scan Limits

1 Select **Scans/Sequences** from the **Live Viewing** menu.

2 Select **Scan Limits** from the Scans/Sequences menu. Figure 4-8 the Scan Limits section will be displayed.

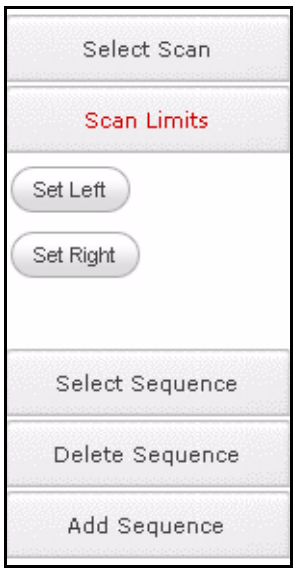


Figure 4-15 Scan Limits section

3 Click the dome icon on the Live Web Video pane and use the camera controls to locate the left scan limit. See Procedure 3-7 Controlling the camera via the Live Web Video pane for further details. Select the **Set Left** button to set the displayed position as the left limit.

4 Use the camera controls to locate the right scan limit. See Procedure 3-7 Controlling the camera via the Live Web Video pane for further details. Select the **Set Right** button to set the displayed position as the right limit.

5 Follow Procedure 4-25 Activating a Scan. The Live Web Video pane will run the scan within the selected scan limits.

Procedure 4-25 Activating a Scan

1 Follow Procedure 4-24 Setting Scan Limits before starting a scan.

2 Select **Scans/Sequences** from the **Live Viewing** menu.

3 Choose **Select Scan** from the Scans/Sequences menu. Figure 4-16 the Select Scan screen will be displayed.

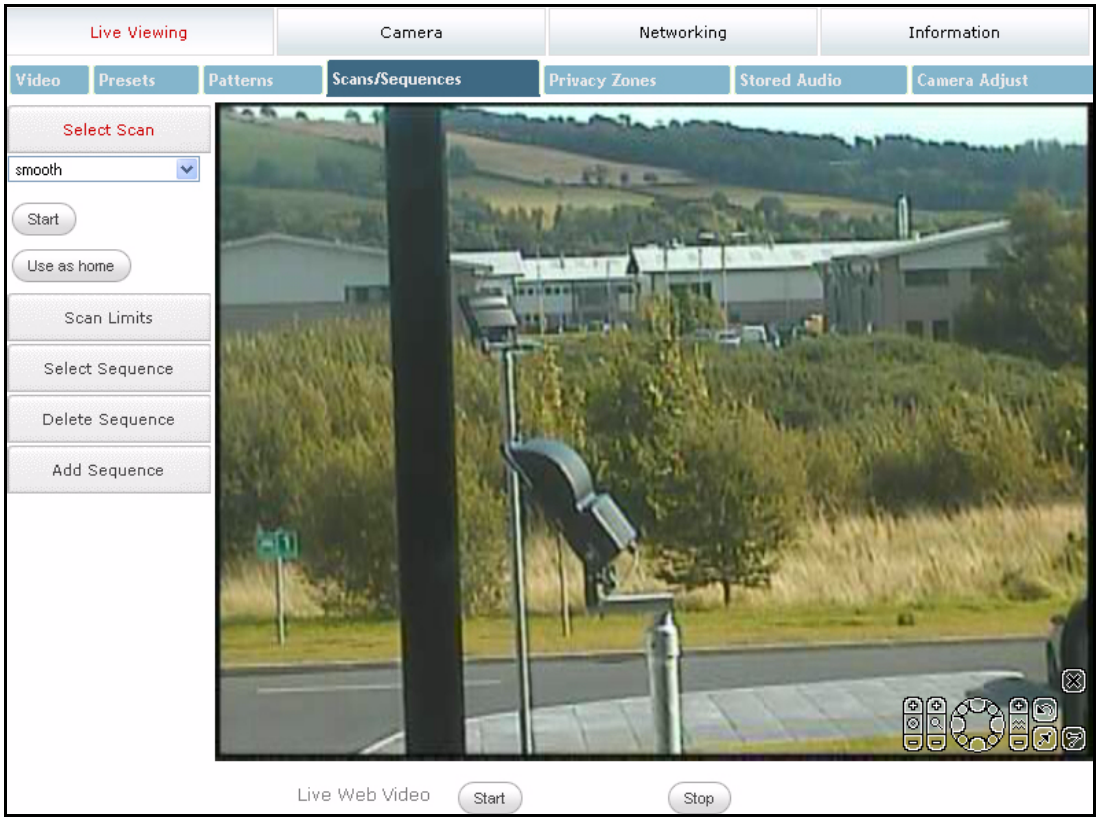


Figure 4-16 Select Scan screen

4 Select the type of scan to perform from the drop-down menu:

- **smooth** - slowly pans between the left and right scan limits, starting at the left scan limit. When the right scan limit is reached, the scan reverses.
- **stepped** - pans slowly, pausing briefly every 10° between the left and right scan limits. Once the right scan limit is reached, the scan reverses.
- **random** - pans randomly between the left and right scan limits. For example, the scan may start at 10°, then pan right 40° and pause, pan right 20° and pause, pan left 30° and pause, and pan right until it reaches the right scan limit.

5 Select the **Start** button to activate the scan. The Live Web Video pane will update and display the selected scan.

The scan will run continuously until interrupted by a camera command, pattern, preset or alarm.

Using Scan as Home Position

The home position runs after a designated period of dome inactivity. Select a home position if you want to keep a specific area under surveillance whenever the dome is not moving.

Follow Procedure 5-6 Display Current Home Position to change the return time for the home position.

Procedure 4-26 Using a Scan as a Home Position

1 Select **Scans/Sequences** from the **Live Viewing** menu.

2 Choose **Select Scan** from the Scans/Sequences menu. Figure 4-16 the Select Scan screen will be displayed.

3 Select the type of scan to perform from the drop-down menu.

4 Select the **Use as Home** button to set the selected scan as the camera home position.

Sequences

A Sequence is a sequential display of multiple camera Presets. Sequences provide a methodical and effective way to monitor multiple areas of interest by switching to different Presets automatically.

Sequences are created by identifying Preset views to include in the Sequence and specifying a dwell time that controls how long each Preset remains on-screen before switching to another Preset. Up to 16 Sequences can be created, each with 16 steps (Presets).

Refer to Procedure 5-18 Add a Sequence for information on adding a sequence.

Procedure 4-27 Selecting a Sequence

1 Follow Procedure 5-18 Add a Sequence.

1 Select **Scans/Sequences** from the **Live Viewing** menu.

2 Choose **Select Sequence** from the Scans/Sequences menu. Figure 4-17 the Select Sequence section will be displayed.

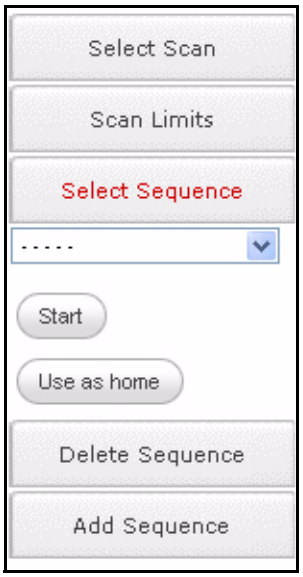


Figure 4-17 Select Sequence

3 Select the sequence from the drop-down menu.

4 Select the **Start** button to activate the sequence.The Live Web Video pane will display the sequence.

The sequence will run continuously until interrupted by a camera command, pattern, preset, scan or alarm.

Using Sequence as Home Position

The home position runs after a designated period of dome inactivity. Select a home position if you want to keep a specific area under surveillance whenever the dome is not moving.

Follow Procedure 5-6 Display Current Home Position to change the return time for the home position.

Procedure 4-28 Using a Sequence as a Home Position

1 Select **Scans/Sequences** from the **Live Viewing** menu.

2 Choose **Select Sequence** from the Scans/Sequences menu. Figure 4-17 the Select Sequence section will be displayed.

3 Select a sequence from the drop-down menu.

4 Select the **Use as Home** button to set the selected sequence as the camera home position.

Procedure 4-29 Delete a Sequence

1 Select **Scans/Sequences** from the **Live Viewing** menu.

2 Select **Delete Sequence** from the Scans/Sequences menu button. Figure 4-18 the Delete Sequence section will be displayed.

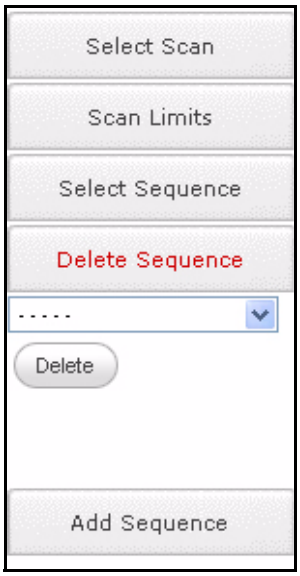


Figure 4-18 Delete Sequence

3 Select a pre-defined sequence from the drop-down menu.

Note

You cannot delete a sequence while it is associated with another camera function. To remove the sequence refer to the associated camera function, Clear the Current Home Position, Configuring Alarm Actions and Editing a Scheduled Task.

4 Select the **Delete** button. You will be prompted to confirm the deletion. Select the **OK** button to confirm or the **Cancel** button to stop the deletion.

Procedure 4-30 Add Sequence

1 Select **Scans/Sequences** from the **Live Viewing** menu.

2 Select **Add Sequence** from the Scans/Sequences menu button. Figure 4-18 the Add Sequence section will be displayed.

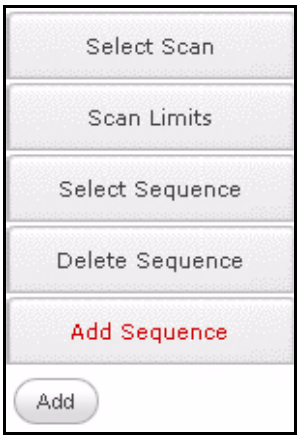


Figure 4-19 Shortcut to Add Sequence

3 Select the **Add** button to open the Add Sequence screen. Refer to Procedure 5-18 Add a Sequence for information on adding a sequence, begin at step 4.

Privacy Zones

The following provides information on configuring Privacy Zones for the IP Dome. Up to 32 privacy zones can be established for the IP Dome.

Note

Ensure that you have the latest version of ActiveX installed.

Privacy Zone Settings

Privacy Zones are “masked” sections of the dome’s viewing area. These masks prevent operators of the surveillance system who do not have access to the dome password from viewing these designated zones. Each zone has four sides, and the zones may overlap to form irregular shapes. The Privacy Zones move in relation to the dome pan/tilt position. In addition, the apparent size of the Privacy Zone adjusts automatically as the zoom level is adjusted.

Privacy Zones are useful for high security areas. For example, you might establish a privacy Zone around a safe’s combination, but still view people approaching or opening the safe.

When Privacy Zones are active, the dome's firmware automatically disables text transparency.

The dome’s firmware prevents you from establishing a zone that is too small or too large (greater than 90-degrees pan or tilt from the starting point).

Note

Areas of the Privacy Zone may be exposed during rapid pan / tilt movements of the dome. To compensate for this limitation, you may want to program the Privacy Zone to be 20 to 25% larger than the area you want to mask.

Procedure 4-31 Defining Privacy Zones

1 Select **Privacy Zones** from the **Live Viewing** page.

2 Select **Add Zone** from the Privacy Zones menu. Figure 4-20 the Adding a Privacy Zone screen will be displayed.

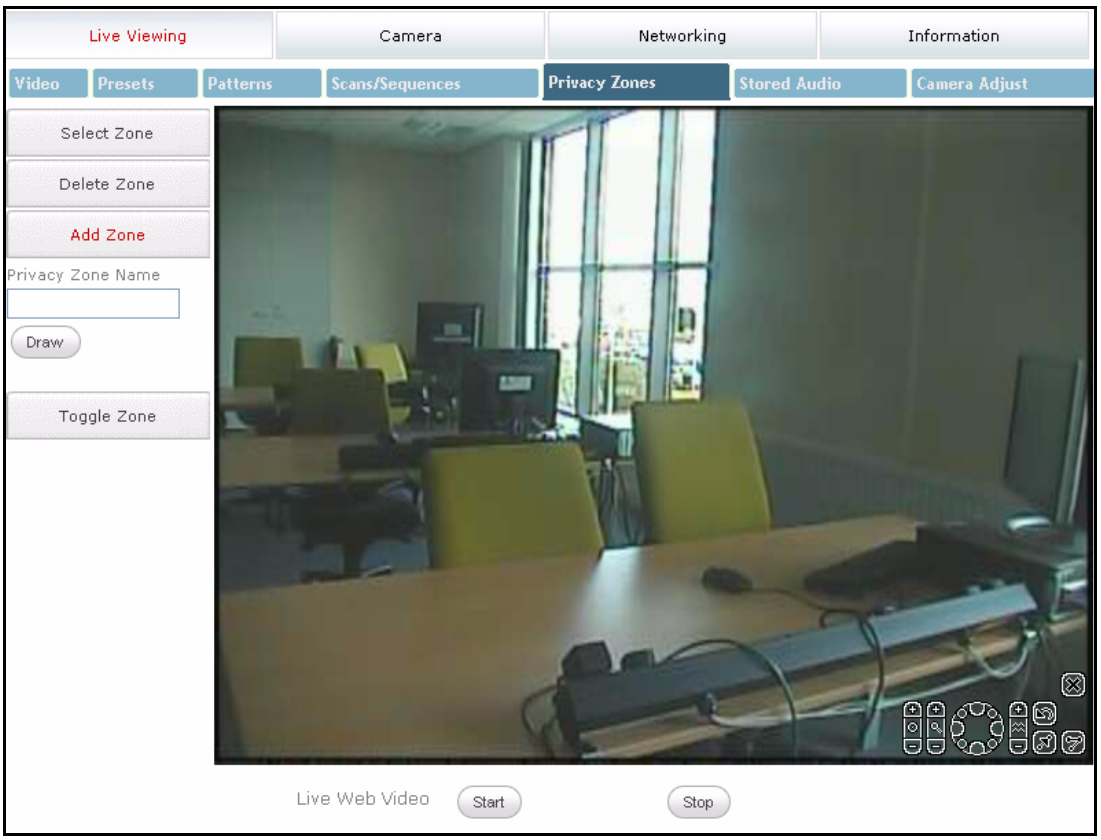


Figure 4-20 Adding a Privacy Zone screen

3 Click on the dome icon, and use the camera controls to position the camera so that the area to be obscured is in the centre of the live viewing pane. See Procedure 3-7 Controlling the camera via the Live Web Video pane for further details.

4 Enter the Privacy Zone name in the text box, and select the **Draw** button. The image will freeze and a still image will be displayed.

The Add Zone section will update with an **Add** and **Cancel** button.

5 Using the cursor locate the start point for the privacy zone then click and drag on the still image to define the area. As you move the cursor an outline will appear on the image which highlights the privacy zone as seen in Figure 4-21.

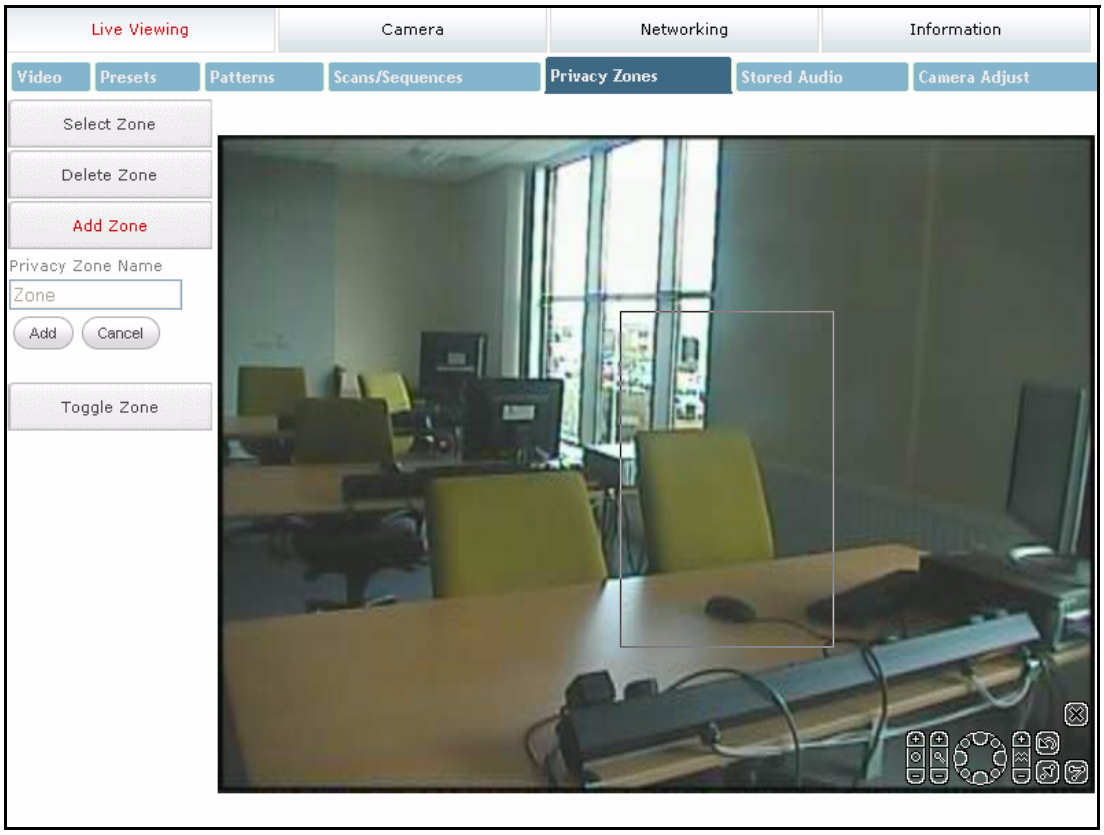


Figure 4-21 Privacy Zone being selected

6 Release the mouse button. The selected area will turn black as seen in Figure 4-22.

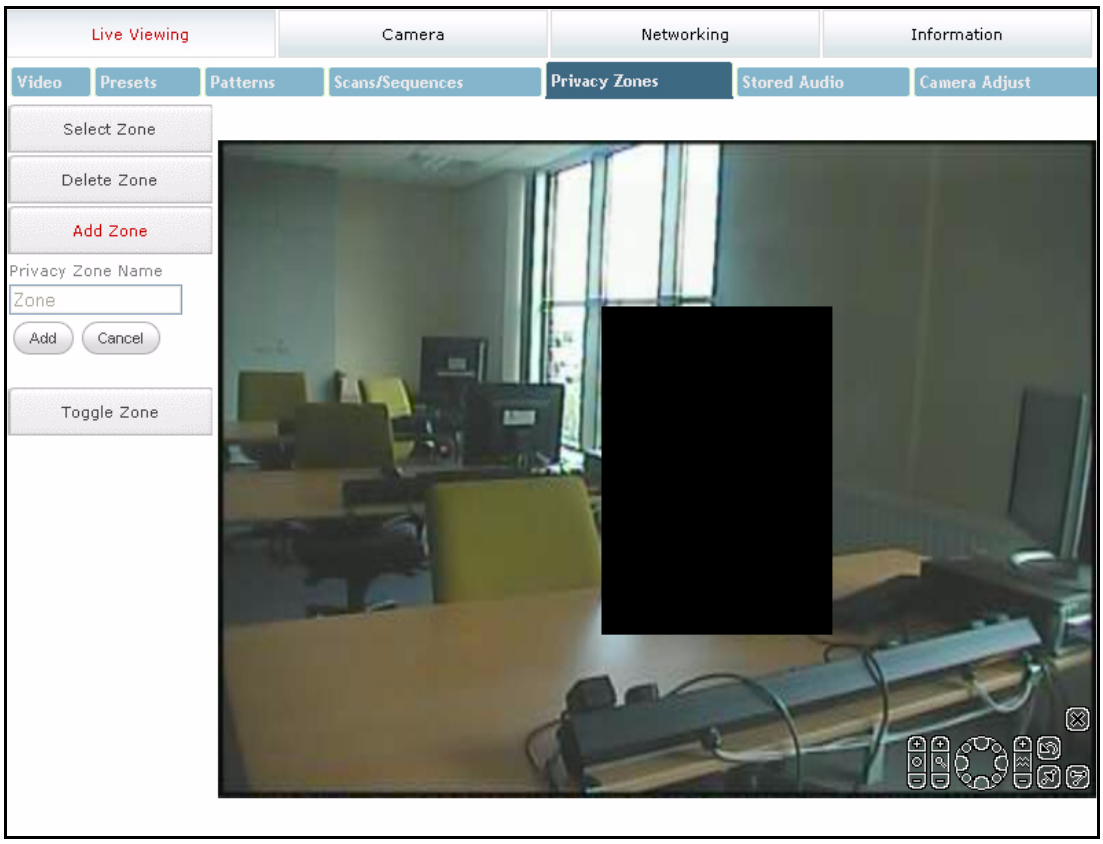


Figure 4-22 Privacy Zone Selected

Note

Areas of the Privacy Zone may be exposed during rapid pan/tilt movements of the dome. To compensate for this limitation, you may want to program the Privacy Zone to be 20 to 25% larger than the area you want to mask.

Note

When creating a small Privacy Zone it is recommended to use a low zoom level, preferably between 1x and 10x. Creating a small privacy zone at a higher zoom level will be less effective as when panning and tilting the camera the zone may appear slightly out of place from the original created position.

7 To reselect an alternative area for the privacy zone repeat steps 5 and 6.

8 Select the **Add** button to save the selected privacy zone. The black rectangle will change to grey to confirm that the privacy zone has been saved. Alternatively select the **Cancel** button to clear the privacy zone name and selection.

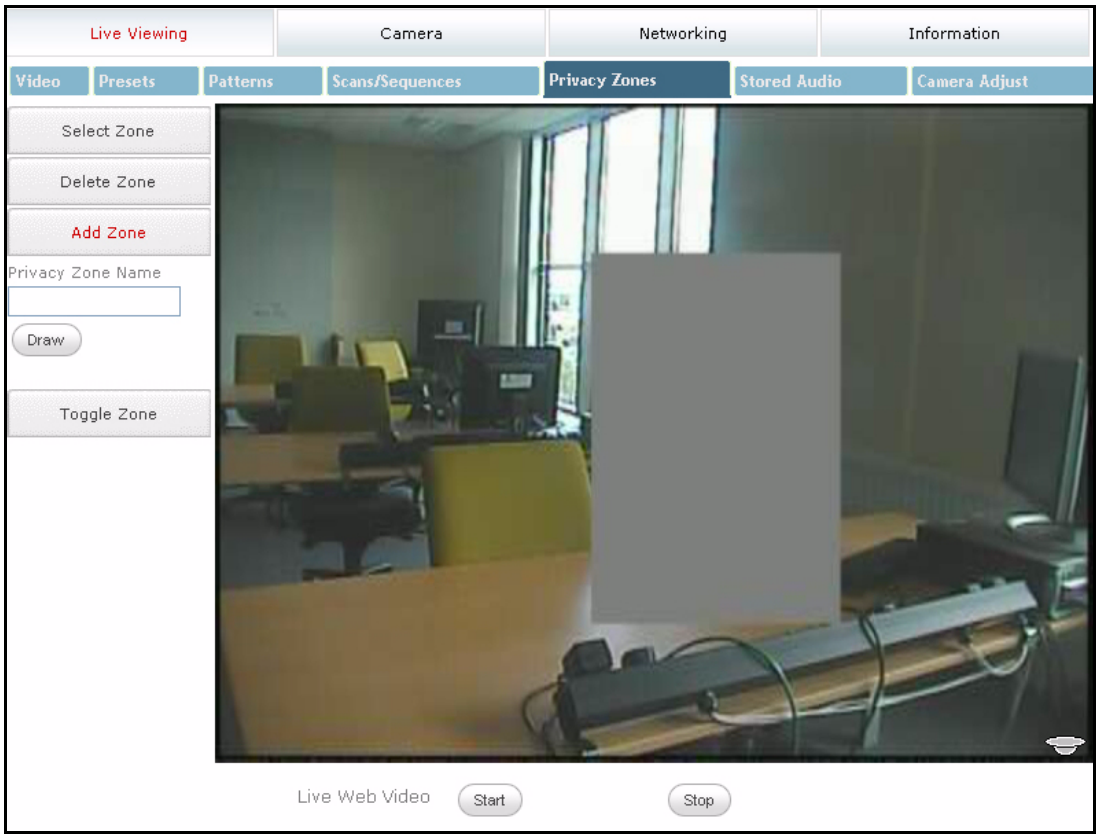


Figure 4-23 Privacy Zone confirmed

The privacy zone will now appear on the Select Zone and Delete Zone drop-down menus.

Procedure 4-32 Selecting a Privacy Zone

1 Select **Privacy Zones** from the **Live Viewing** page.

2 Choose **Select Zone** from the Privacy Zones menu. Figure 4-24 the Select Zone section will be displayed

Figure 4-24 Select Zone

3 Select the pre-defined privacy zone from the drop-down menu.

4 Select the **Goto** button to activate the privacy zone. The Live Web Video pane will update to display the selected privacy zone.

Procedure 4-33 Delete a Privacy Zone

1 Select **Privacy Zones** from the **Live Viewing** page.

2 Select **Delete Zone** from the Privacy Zones menu. Figure 4-25 the Delete Zone section will be displayed

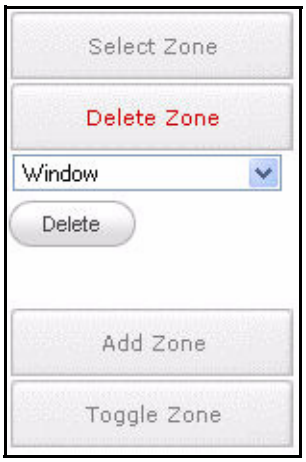


Figure 4-25 Delete Zone

3 Select a pre-defined zone from the drop-down menu.

4 Select the **Delete** button. You will be prompted to confirm the deletion. Select the **OK** button to confirm or the **Cancel** button to stop the deletion.

Procedure 4-34 Toggle Privacy Zones

Allows the user to enable and disable privacy zones.

1 Select **Privacy Zones** from the **Live Viewing** page.

2 Select **Toggle Zone** from the Privacy Zones menu. Figure 4-26 the Toggle Zone section will be displayed

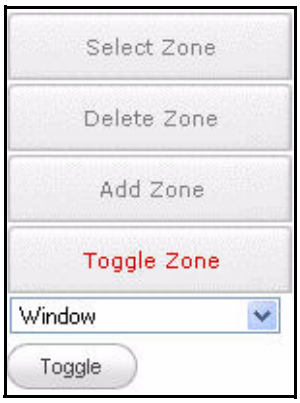


Figure 4-26 Toggle Zone

3 Select a pre-defined zone from the drop-down menu.

4 Select the **Toggle** button. If the zone is currently disabled it will be enabled. Select the Toggle button again to disable the privacy zone.

Note

Disabled Privacy Zones are followed with an '*'.

5 Repeat steps 3 and 4 to enable or disable further privacy zones.

Stored Audio

The IP Dome is capable of playing back stored audio. The dome supports one channel of bi-directional audio, streamed as uncompressed data. Audio 'frames' are time stamped to allow the synchronization of audio and video playback. This is part of the normal program stream protocol.

Note

Audio can only be used if a Micro SD Card has been installed. Refer to the printed Quick Start Guide for information on how to install the micro SD card.

Note

A maximum of three audio files can be uploaded and used by the IP Dome.

Audio File Requirements

When uploading an audio file it must meet the following requirements.

- The filename cannot contain spaces.
- It must be a ‘wav’ file with a ‘.wav’ extension.
- A single channel mono file with a bit depth of 16kHz.
- The sample rate must be 8kHz.
- The duration must be no longer than 20 seconds.

Procedure 4-35 Add Audio

Note

The audio volume can be adjusted by following Procedure 3-6 Checking camera feed using the Live Viewing function step 6.

1 Select **Stored Audio** from the **Live Viewing** page.

2 Select **Add Audio** from the Stored Audio menu. Figure 4-27 the Add Audio screen will be displayed.

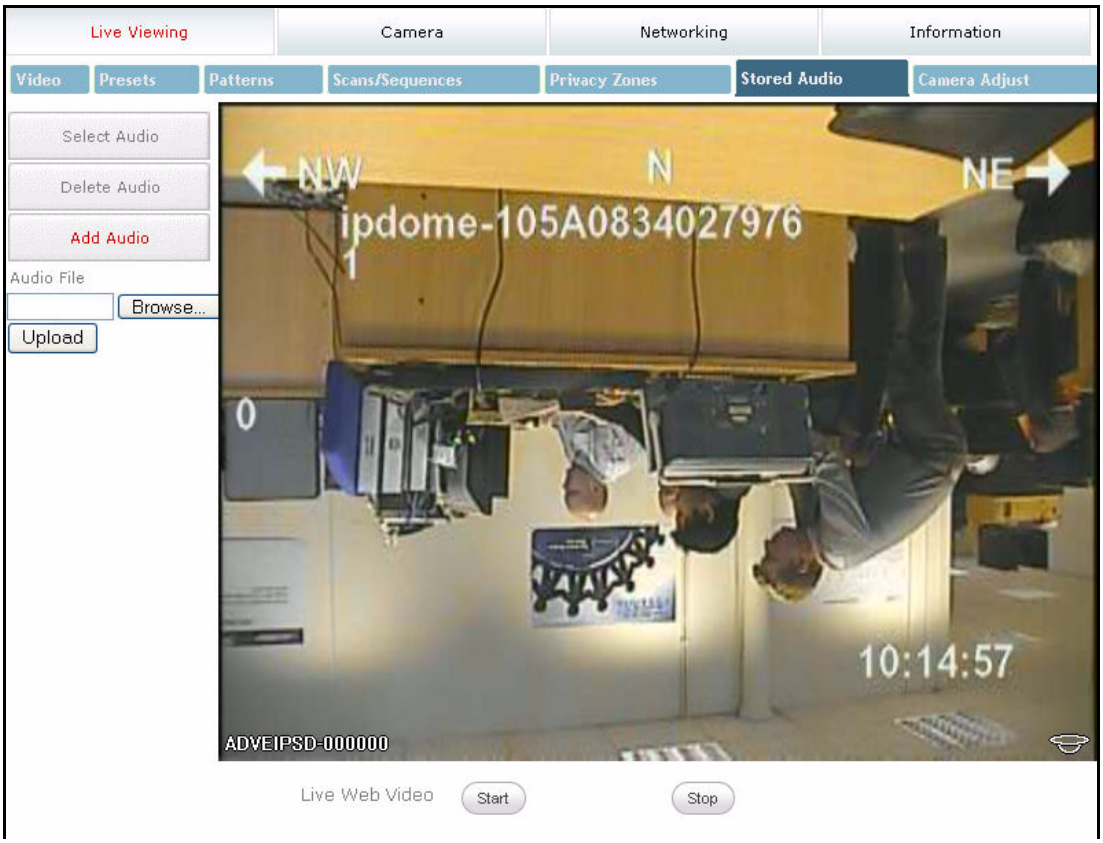


Figure 4-27 Add Audio screen

Note

If the Browse and Upload buttons are unavailable, an example is shown in Figure 4-28, the maximum number of audio files have been uploaded. It will be necessary to delete an existing audio file before uploading a new one. Follow Procedure 4-37 Deleting Audio then return to this procedure.

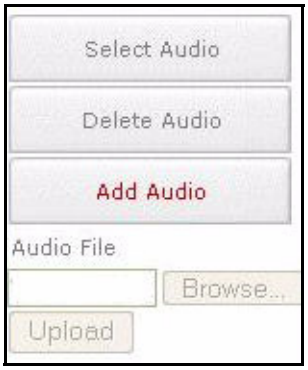


Figure 4-28 Audio clips cannot be uploaded

3 Select the **Browse** button. The Choose file dialog will be displayed, navigate to the location where the audio file has been saved. Select the audio file then select the **Open** button.

Note

The audio filename cannot contain spaces. An 'Invalid item name' error message will be displayed.

4 Select the Upload button. You will be prompted to confirm that you would like to upload the audio file. Select the **OK** button to confirm or the **Cancel** button to stop the upload.

5 The audio file will now appear on the **Select Audio** and **Delete Audio** drop-down menus.

Procedure 4-36 Selecting Audio

1 Select **Stored Audio** from the Live Viewing menu.

2 Choose **Select Audio** from the Stored Audio menu. Figure 4-8 the Select Audio section will be displayed.

Figure 4-29 Select Audio

3 Select the Audio clip to play from drop-down menu.

4 Select the **Start** button to activate the audio.

Procedure 4-37 Deleting Audio

1 Select **Stored Audio** from the **Live Viewing** menu.

2 Select **Delete Audio** from the Stored Audio menu. Figure 4-30 the Delete Audio section will be displayed.

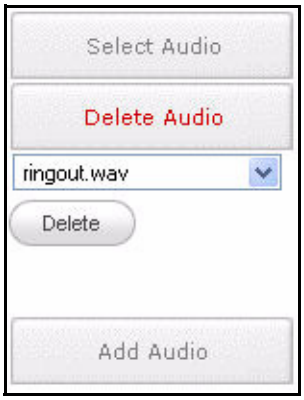


Figure 4-30 Delete Audio

3 Select the audio clip to delete from the drop-down menu.

4 Select the **Delete** button to delete the audio clip. You will be prompted to confirm the deletion. Select the **OK** button to confirm or the **Cancel** button to stop the deletion.

Camera Adjust

This section describes how to adjust the camera's settings.

When Camera Adjust is selected from the Live Viewing menu. Figure 4-31 the Camera Adjust screen will be displayed.

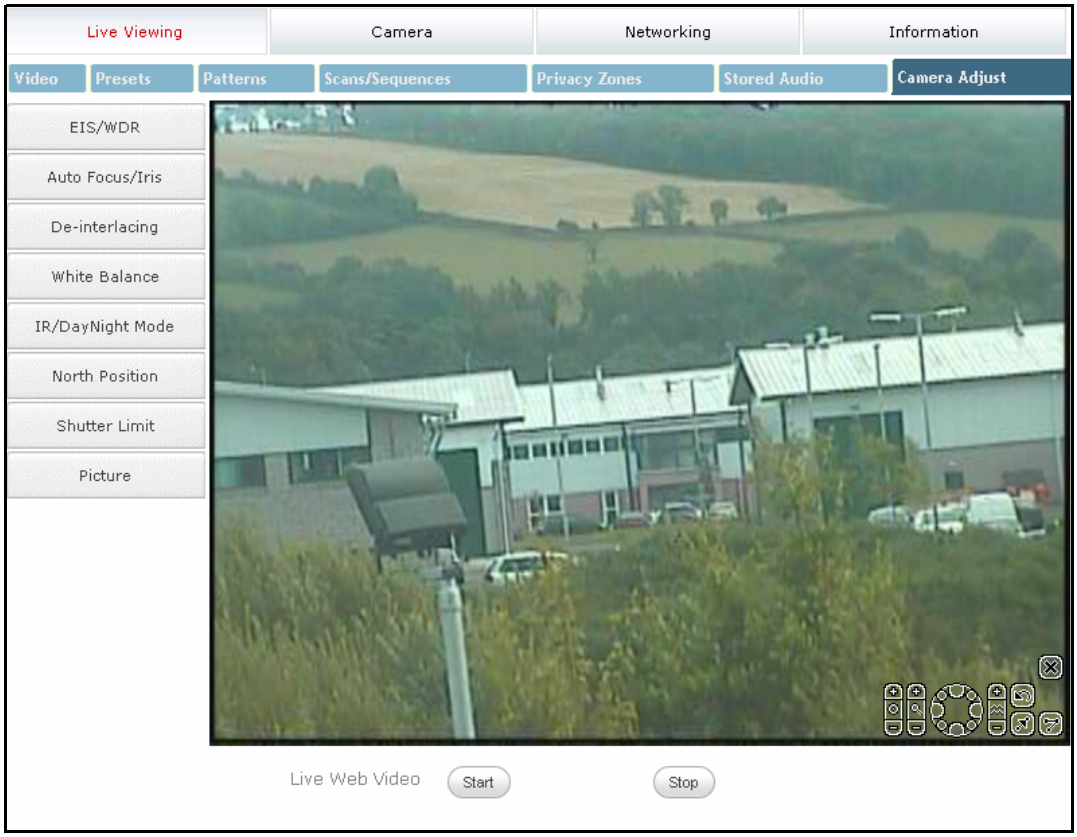


Figure 4-31 Camera Adjust screen

Electronic Image Stabilization and Wide Dynamic Range

EIS is used to help stabilize the image when the dome is being externally vibrated, for example, when it is situated on a light pole in windy conditions or on a dropped ceiling being vibrated by an air conditioning unit.

Procedure 4-38 Configuring the Electronic Image Stabilization

1 Select **Camera Adjust** from the **Live Viewing** menu.

2 Select **EIS/WDR** from the Camera Adjust menu. Figure 4-32 the EIS/WDR section will be displayed.

Figure 4-32 EIS/WDR

3 In the EIS/WDR section select a setting:

- **Off** - turns off the image stabilization and allows WDR to be selected)
- **5Hz** - designed to stabilize the dome when unwanted dome movements are at 5Hz)
- **10Hz** - designed to stabilize the dome when unwanted dome movements are at 10Hz)

The default setting is ‘off’.

Note

When Electronic Image Stabilization is enabled, the WDR and Open Shutter cannot be enabled. Digital Zoom is also limited to 64X.

Wide Dynamic Range

Wide Dynamic Range (WDR) is a feature that allows clear viewing of both bright and low light areas in a scene. Use this feature if you need to view both indoor and outdoor lighting conditions simultaneously.

Note

The Wide Dynamic Range feature is only available on 35X camera domes.

Procedure 4-39 Configuring Wide Dynamic Range

1 Select **Camera Adjust** from the **Live Viewing** menu.

2 Select **EIS/WDR** from the Camera Adjust menu. Figure 4-32 the EIS/WDR section will be displayed.

3 Select Off in the EIS Setting.

Note

When Electronic Image Stabilization is enabled, the WDR feature cannot be enabled.

4 Select the check box in the Wide Dynamic Range section to enable or disable the function. The default setting is disabled.

Focus and Iris Control

Auto iris lenses enable reliable monitoring in areas where light levels are unpredictable. These lenses offer high contrast, fast signal response, color corrected optics, and low geometric distortion.

Manual iris lenses provide a solution for situations where scene and lighting requirements are relatively stable.

Procedure 4-40 Configuring the Auto Iris setting

1 Select **Camera Adjust** from the **Live Viewing** menu.

2 Select **Auto Focus/Iris** from the Camera Adjust menu. Figure 4-33 the Auto Focus/Iris section will be displayed.

Figure 4-33 Auto Focus/Iris

3 Select the Auto Iris check box to enable or disable the Auto Iris function. The default setting is enabled.

Procedure 4-41 Configuring the Auto Focus setting

1 Select **Camera Adjust** from the **Live Viewing** menu.

2 Select **Auto Focus/Iris** from the Camera Adjust menu. Figure 4-33 the Auto Focus/Iris section will be displayed

3 Select the Auto Focus check box to enable or disable the Auto Focus function. The default setting is enabled.

De-Interlacing

De-Interlacing is the process of improving the picture quality of an image that implements interlaced video. Interlace video standards require individual frames to be captured from a camera as two separate images. A video frame is divided into an odd and even field, where the odd field captures all the odd lines of the image and sends those pixels to the display first, then the even field captures all the even lines and sends those pixels to the display. The two fields are captured at separate points in time from the camera, and are later interlaced, or woven together, to form a complete frame at the display.

It is this capturing of fast motion images at separate points in time that cause artifacts in the video. These artifacts are removed with the De-Interlacing Processing Block, providing enhanced visual

quality, reduce the workload for down stream image compression techniques and also save storage space on a network video recorder.

The effectiveness of de-interlacing is clearly visible on Figure 4-34 and Figure 4-35. In Figure 4-34 de-interlacing has been disabled, this results in an unclear image. In Figure 4-35 de-interlacing has been enabled and a clear image is visible.

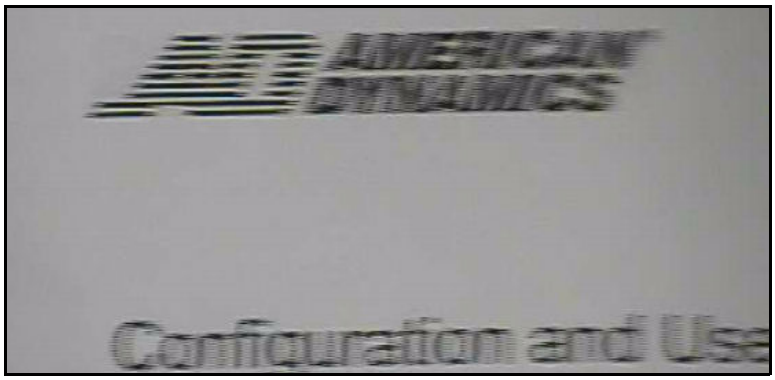


Figure 4-34 De-Interlacing disabled

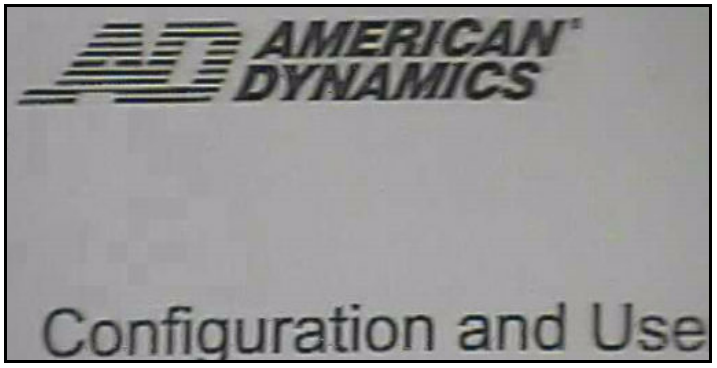


Figure 4-35 De-Interlacing enabled

For best results it is recommended that de-interlacing should always be enabled on the IP Dome.

Procedure 4-42 Configuring the De-Interlacing setting

1 Select **Camera Adjust** from the **Live Viewing** menu.

2 Select **De-Interlacing** from the Camera Adjust menu. Figure 4-36 the De-Interlacing section will be displayed.

Figure 4-36 De-Interlacing section

3 Select the De-Interlacing check box to enable or disable the De-Interlacing function. The default setting is enabled.

Note

It is recommended that de-interlacing should always be enabled on the IP Dome.

Automatic White Balance

White balance is normally compensated for by the automatic white balance gain control. In some lighting conditions, you may need to adjust the red and blue settings manually for optimal viewing.

When Automatic White Balance is enabled, the red and blue setting values are based on feedback from the camera. When Automatic White Balance is disabled, the camera uses the red and blue setting values to control the white balance. When Automatic White Balance is first switched from On to Off, the red and blue values displayed are based on the current feedback from the camera. The red and blue values range from 1 to 511.

Note

Auto White Balance must be set to Off to modify the Red and Blue settings manually.

Figure 4-37 illustrates the relationship of the red and blue settings to the white balance.

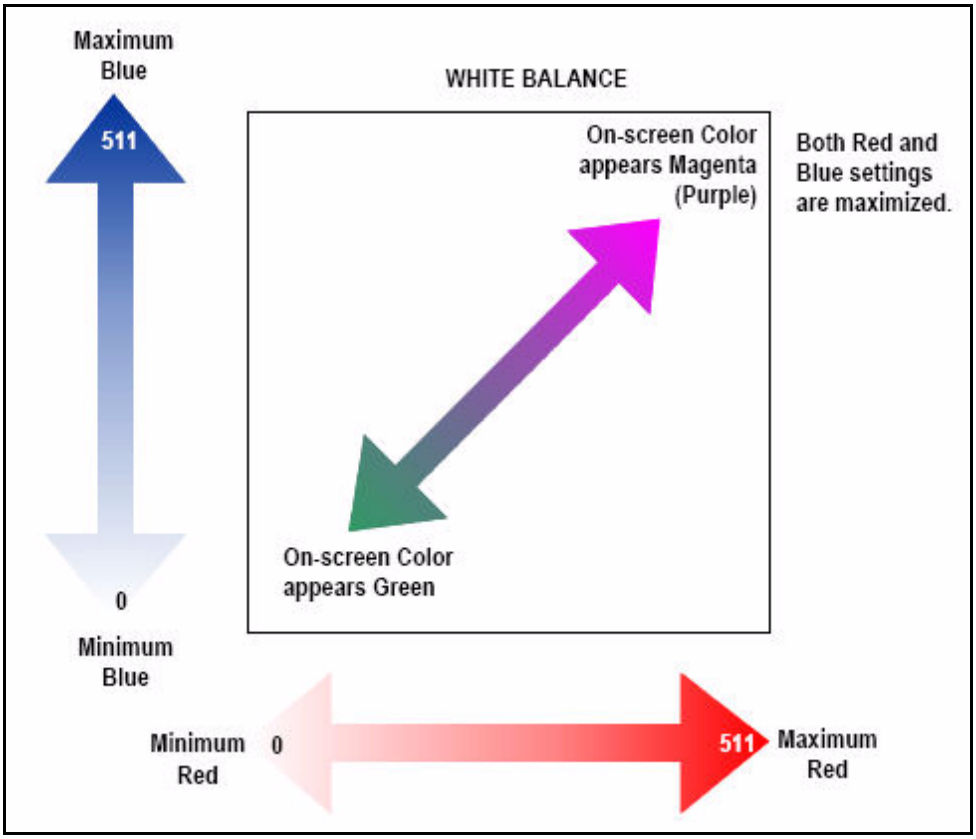


Figure 4-37 Automatic White Balance

Procedure 4-43 Configuring the Automatic White Balance

1 Select **Camera Adjust** from the **Live Viewing** menu.

2 Select **White Balance** from the Camera Adjust menu. Figure 4-38 the White Balance section will be displayed.

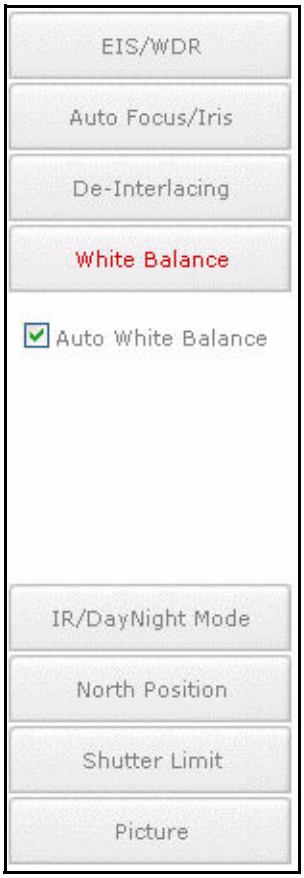


Figure 4-38 White Balance

3 Select the Auto White Balance check box to enable or disable the White Balance function. The default setting is enabled.

Note

When Automatic White Balance is disabled, the camera uses the red and blue setting values to control the white balance. See Procedure 4-44 Configuring the Red and Blue Settings.

Procedure 4-44 Configuring the Red and Blue Settings

1 Select **Camera Adjust** from the **Live Viewing** menu.

2 Select **White Balance** from the Camera Adjust menu. Figure 4-38 the White Balance section will be displayed.

3 Disable the White Balance function by selecting the check box, Figure 4-39 the Red and Blue balance section will be displayed.

Note

When Automatic White Balance is first switched from disabled to enabled, the red and blue values displayed are based on the current feedback from the camera.

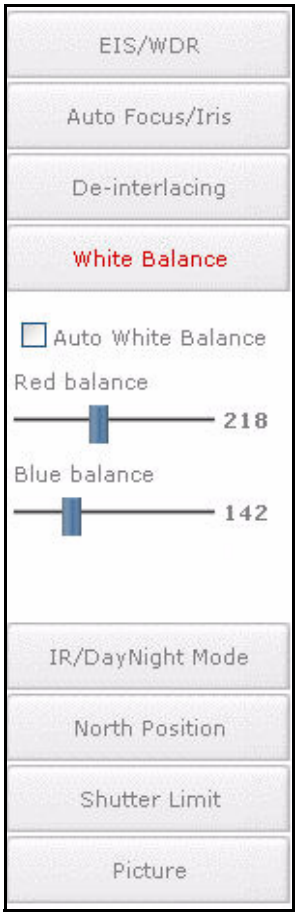


Figure 4-39 Red and Blue balance

4 Use the slider to change the Red and Blue balance. The slider bar can be moved left or right using the mouse or for fine adjustments using the left and right arrow keys on the PC keyboard. The red and blue values range from 0 to 511.

Infra Red Features

Note

Infra Red features are only available on 35X camera domes.

IR Mode

When the camera is in B/W mode, sensitivity and focusing can be improved using IR Illumination. Optimize the camera block by matching the lighting to get a sharper IP picture. Table 4-3 — Corresponding IR Switching with IR Illumination at 850nM below is an example of what will happen with the incorrect illumination.

Zoom tracing is the process of maintaining auto focus as the zoom lens moves in or out.

IR Curve	Focusing status after switching IR On from IR Off	Zoom tracing
Visible	**Not in focus**	**Won't be zoom traced**
850nM	**Will be focused**	**Will be zoom traced**
950nM	**Not in focus**	**Won't be zoom traced**

Table 4-3 — Corresponding IR Switching with IR Illumination at 850nM

Day/Night Mode

The IP Dome provides a black-and-white (B/W) mode to improve camera performance when the light level falls below certain thresholds. This allows clear images to be obtained under low-light conditions. This is referred to as IR Mode. There are five IR Mode settings: Off, nM On, nM Auto High, nM Auto Mid, and nM Auto Low. nM stands for nano meters.

The table below lists the approximate lux values when the camera is expected to switch between color and B/W modes. Actual values depend on the current zoom setting of the camera and the light source.

IR Mode Setting	Camera Performance	B/W Mode Activates	B/W Mode Deactivates
Off	**No B/W capabilities**	**N/A**	**N/A**
nM On	**Full-time B/W mode**	**N/A**	**N/A**
nM Auto High	**Cleanest possible picture** **No field integration effect**	**~30 lux**	**~135–155 lux**
nM Auto Mid	**Minimizes field integration effect**	**~3 lux**	**~20–25 lux**
nM Auto Low	**Maximizes color low-light performance**	**~0.5 lux**	**~10–12 lux**

Table 4-1 — IR Mode Parameters

Procedure 4-45 Configuring the IR Mode setting

Switching to black-and-white (B/W) mode when the light level falls below certain thresholds allows clear images to be obtained under low-light conditions.

1 Select **Camera Adjust** from the **Live Viewing** menu.

2 Select **IR/Day Night Mode** from the Camera Adjust menu. Figure 4-40 the IR/Day Night Mode section will be displayed.

Figure 4-40 IR/Day Night Mode section

3 In the IR/DayNight Mode section, use the DayNight Mode drop-down menu to select:

- **visible** - no special lighting
- **850nm**
- **950nm**

The default setting is ‘visible’.

Procedure 4-46 Configuring the Day/Night Mode setting

1 Select **Camera Adjust** from the **Live Viewing** menu.

2 Select **IR/Day Night Mode** from the Camera Adjust menu. Figure 4-40 the IR/Day Night Mode section will be displayed

3 In the IR/DayNight Mode section, use the DayNight Mode drop-down menu to select:

- **off** - disable the IR mode. The camera will operate in color mode only.
- **on** - enable full-time B/W mode.
- **autohigh** - enable automatic B/W mode at approximately 30 lux.
- **automid** - enable automatic B/W mode at approximately 3 lux.
- **autolow** - enable automatic B/W mode at approximately 0.5 lux.

The default setting is ‘automid’.

Note

If EIS is enabled autolow and automid will be unavailable.

Note

If AGC/Shutter Setting is set to openshutter autohigh will be unavailable.

North Position

Direction Indicators permit you to understand the approximate pointing position of the dome to an established reference point. This reference point is called “North” and may correspond to magnetic north (if it is known) or some other landmark or fixture. When the dome is initially installed, “North” defaults to a pre-defined position (0° pan/tilt). You may program the “North” position to be any point along the dome's pan axis.

Procedure 4-47 Set North Position

1. Follow Procedure 3-5 Starting the Live Web Video feed.
2. Select **Camera Adjust** from the **Live Viewing** menu.
3. Select **North Position** from the Camera Adjust menu. Figure 4-41 the North Position section will be displayed.

Figure 4-41 North Position

4 Use Procedure 3-7 Controlling the camera via the Live Web Video pane or/and Procedure 3-8 Controlling Pan and Tilt via a mouse using the Live Web Video pane to locate the desired north position.

5 Select the **Set** button to confirm the North Position.

Shutter Limit

The Shutter Limit value sets the video update time in fractions of a second. Depending on the lighting conditions, the video information may be updated more frequently, but no slower than the limit set.

Automatic Gain Control

The IP Dome provides settings for compensating for low-light scenes in color: Automatic Gain Control and Open Shutter. Automatic Gain Control (AGC) amplifies the video signal in scenes with minimal light. Many low-light scenes result in picture noise. As gain is increased, the picture noise is also amplified.

Procedure 4-48 Configuring the AGC/Shutter Setting

1 Select **Camera Adjust** from the **Live Viewing** menu.

2 Select **Shutter Limit** from the Camera Adjust menu. Figure 4-42 the Shutter Limit section will be displayed.

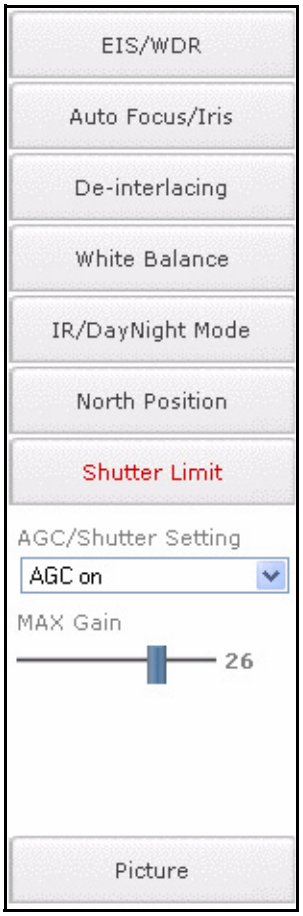


Figure 4-42 Shutter Setting off

3 Select an AGC/Shutter Setting from the drop-down menu:

- **AGC off** - produces the cleanest image with the least noise but is not suitable for low light scenes.
- **AGC on** - good for low light scenes but slight noise will be visible.
- **openshutter** - best for low light scenes but will show a lot of noise.

The default setting is ‘openshutter’.

Note

If you require “Real Time” video this feature must be turned off to ensure that the resulting video quality is acceptable for prosecution purposes.

Procedure 4-49 Configuring the MAX Gain setting

The Max Gain setting is an upper limit for how much gain can be increased when AGC is enabled. The trade-off between picture level (brightness) and noise may be adjusted by setting the Max Gain value. Lower values for Max Gain setting may result in a darker picture with less noise. Higher values for Max Gain setting may result in a brighter picture with more noise.

1 Select **Camera Adjust** from the **Live Viewing** menu.

2 Select **Shutter Limit** from the Camera Adjust menu. Figure 4-43 the Shutter Limit section will be displayed.

3 When ‘on’ or ‘openshutter’ is selected from the AGC/Shutter Setting drop-down menu the MAX Gain section will be displayed as in Figure 4-43.

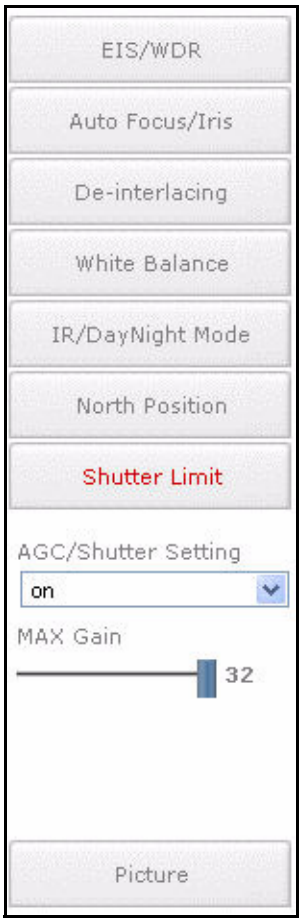


Figure 4-43 Shutter Setting on

4 In the MAX Gain section use the slider to select the maximum gain. Selecting a lower value will give a cleaner image but reduced low light performance, a higher value will give better low light performance but a more noise will be visible.

The slider bar can be moved left or right using the mouse or for fine adjustments using the left and right arrow keys on the PC keyboard. The values range from:

- **10-32** (35X NTSC)
- **10-32** (35X PAL)
- **0-28** (22X PAL/NTSC)

The default setting is 26 (35x) / 27 (22x).

Shutter Speed

The IP Dome provides the ability to view color images from extremely low light situations. This feature is called Open Shutter and is only in effect during low light situations where an image would not be obtainable otherwise. It does not affect the camera performance in normal or bright light situations.

When the Open Shutter is enabled and the scene illumination is too low to obtain a clear image at the normal video rate, the camera collects luminance information from multiple fields. As it does so, the current video information is retransmitted until new information is available from the camera. Under these conditions, moving objects will appear blurred, and still images may appear blurred, choppy, and with more static than video obtained under normal lighting conditions.

The Shutter Limit value sets the video update time in fractions of a second. Depending on the lighting conditions, the video information may be updated more frequently, but no slower than the limit set.

In addition to the AGC settings, you may also adjust the Open Shutter settings to improve dome performance in low light situations. When using the Open Shutter feature it is possible for the IP Dome to view color images from extremely low light situations. This feature is only in effect during low light situations where an image would not be obtainable otherwise. It does not affect the camera performance in normal or bright light situations.

The following table shows the relationship between AGC and the Open Shutter.

AGC/Shutter Setting	Max Gain	Limit
AGC Off	**N/A**	**N/A**
AGC On	**0–28 dB (NTSC)** **0–29 dB (PAL)**	**N/A**
Open Shutter	**0–28 dB (NTSC)** **0–29 dB (PAL)**	**1/2–1/60 (NTSC)** **2/3–1/50 (PAL)**

Table 4-2 — AGC and Open Shutter relationship

Procedure 4-50 Configuring the Shutter Speed setting

1 Select **Camera Adjust** from the **Live Viewing** menu.

2 Select **Shutter Limit** from the Camera Adjust menu. Figure 4-43 the Shutter Limit section will be displayed.

3 When ‘openshutter’ is selected from the AGC/Shutter Setting drop-down menu the MAX Gain and Shutter Speed section will be displayed as in Figure 4-44.

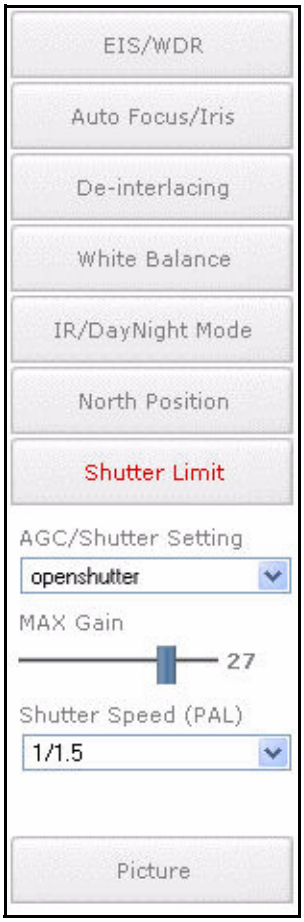


Figure 4-44 Shutter Setting at openshutter

4 In the MAX Gain section use the slider to select the maximum gain. Selecting a lower value will give a cleaner image but reduced low light performance, a higher value will give better low light performance but a more noise will be visible.

The slider bar can be moved left or right using the mouse or for fine adjustments using the left and right arrow keys on the PC keyboard. The values range from:

- **10-32** (35X NTSC)
- **10-32** (35X PAL)
- **0-28** (22X PAL/NTSC)

The default setting is 26 (35x) / 27 (22x).

5 Select the Shutter Speed from the drop-down menu.

- **2/3 (PAL)**
- **1/3 (PAL)**
- **1/6 (PAL)**
- **1/12 (PAL)**
- **1/25 (PAL)**
- **1/25 (PAL)**
- **1/2 (NTSC)**
- **1/4 (NTSC)**
- **1/8 (NTSC)**
- **1/15 (NTSC)**
- **1/30 (NTSC)**
- **1/60 (NTSC)**

Selecting a fast shutter speed will give the least amount of artifacts but reduced low light performance, a slower shutter speed will give better low light performance but more artifacts will be visible.

6 The default setting is 1/3 (PAL) and 1/4 (NTSC).

Picture

Adjust brightness, contrast, hue and saturation of the image displayed in the Live Web Video pane.

Procedure 4-51 Changing the Brightness, Contrast, Hue and Saturation

1 Follow Procedure 3-5 Starting the Live Web Video feed.

2 Select **Camera Adjust** from the **Live Viewing** menu.

3 Select **Picture** from the Camera Adjust menu. Figure 4-45 the Picture section will be displayed.

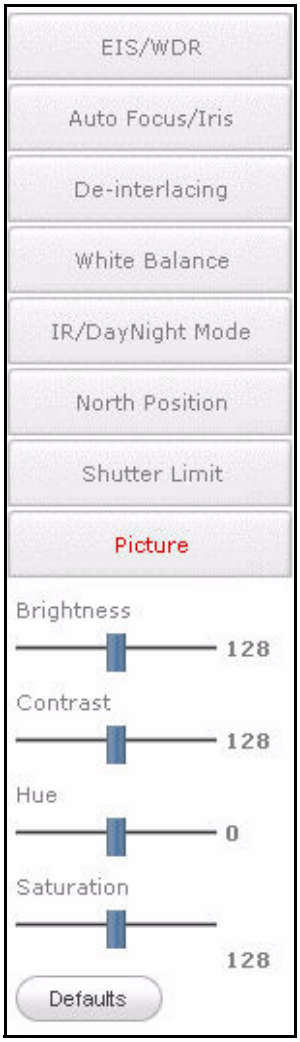


Figure 4-45 Picture section

4 Use the slider to change the Brightness. The slider bar can be moved left or right using the mouse or for fine adjustments using the left and right arrow keys on the PC keyboard. The values range from 0 to 255. The image displayed in the Live Web Video pane will update to display the changes. The default setting is 128.

5 Use the slider to change the Contrast. Contrast changes shades between the lightest and darkest areas of the Live Web Video display. The values range from 0 to 255. The image displayed in the Live Web Video pane will update to display the changes. The default setting is 128.

6 Use the slider to change the Hue. The values range from -128 to 127. The image displayed in the Live Web Video pane will update to display the changes. The default setting is 0.

7 Use the slider to change the Saturation. Saturation determines how intense or vibrant the colors are on the live video web display. The values range from 0 to 255. The image displayed in the Live Web Video pane will update to display the changes. The default setting is 128.

Procedure 4-52 Restore Picture Defaults

1 Select **Camera Adjust** from the **Live Viewing** menu.

2 Select **Picture** from the Camera Adjust menu. Figure 4-45 the Picture section will be displayed.

3 Select the **Defaults** button to restore the Live Web Video picture default settings.

In this section you can adjust the camera settings, including PTZ configuration, Overlay Settings, Alarms, Video and Audio.

PTZ Configuration

When PTZ Configuration is selected from the Camera menu. Figure 5-1the PTZ Configuration screen will be displayed.

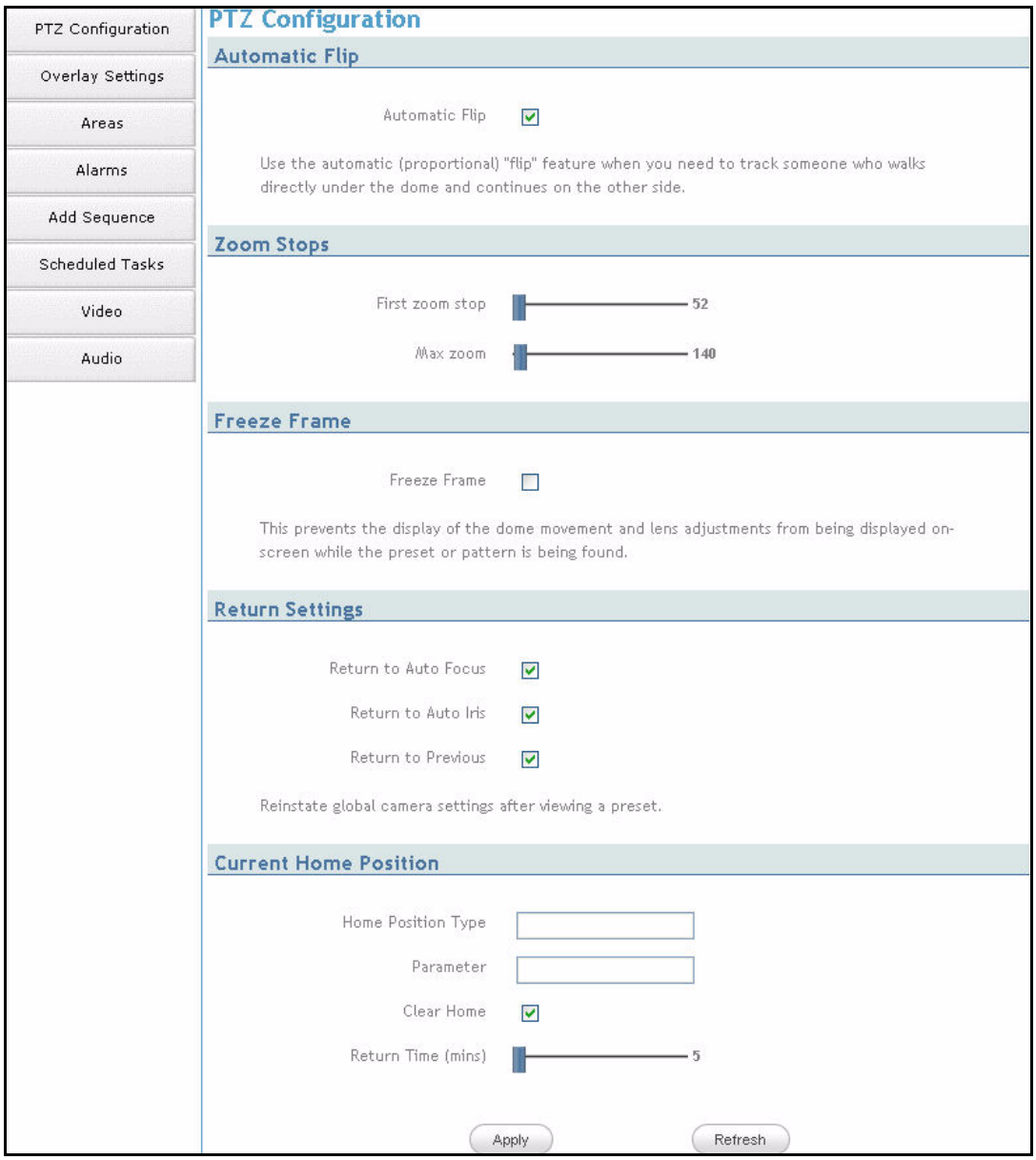


Figure 5-1 PTZ Configuration screen

Automatic Flip

Use the automatic (proportional) “flip” feature when you need to track someone who walks directly under the dome and continues on the other side. You start the flip by moving the tilt control to its lower limit and holding for a brief period. When the flip engages, the dome automatically rotates 180°. You may then continue to track the person as long as the tilt control stays in its lower limit. Once the tilt control is released, the dome resumes normal operation.

Procedure 5-1 Configuring the Automatic Flip setting

1 Select **PTZ Configuration** from the **Camera** menu.

2 In the Automatic Flip section select the check box to enable or disable Automatic Flip. The default setting is enabled.

3 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Zoom Stop

Zoom stop settings define how the zoom function is partitioned. Depending on the current zoom level, the camera will either stop at the first zoom stop setting or continue to the maximum zoom setting.

Note

The Zoom Stop will not be used if EIS is turned enabled to either 5Hz or 10Hz.

22X Camera Dome

The IP Dome 22X includes a 22X optical zoom camera with 12X digital zoom capability. The maximum possible zoom is 264X.

The following example explains how 22X camera zoom stop settings work.

The default 22X camera settings are **33X** for the first zoom stop setting and **88X** for the maximum zoom setting. If the current zoom level is less than 33X, pressing Zoom In continuously causes the zoom to stop at 33X. If the zoom level is 33X or greater, pressing Zoom In continuously causes the zoom to stop at the maximum zoom setting of 88X. The second zoom stop remains in effect until the zoom function is reduced to less than the first zoom stop setting (33X) and the zoom button is released for one second or longer. To achieve higher zoom levels, change the maximum zoom setting.

2X is the margin of error for the zoom stop settings.

Procedure 5-2 Configuring the 22X Camera Zoom Stop settings

1 Select **PTZ Configuration** from the **Camera** Menu.

2 In the Zoom Stops section use the slider to change the First Zoom Stop setting. The slider bar can be moved left or right using the mouse or for fine adjustments using the left and right arrow keys on the PC keyboard. The default first zoom setting is 33X.

- Move the slider to 22 to set the first zoom stop to 22X magnification.
- Move the slider to 33 to set the first zoom stop to 33X magnification.

3 Use the slider to change the Max Zoom setting. The Max Zoom setting should always be higher than the First Zoom setting. The default maximum zoom setting is 88X.

4 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

35X Camera Dome

The IP Dome 35X camera dome includes a 35X optical zoom camera with 12X digital zoom capability. The maximum possible zoom is 420X.

The following example explains how 35X camera zoom stop settings work.

The default camera settings are **52X** for the first zoom stop setting and **140X** for the maximum zoom setting. If the current zoom level is less than 52X, pressing Zoom In continuously causes the zoom to stop at 52X. If the zoom level is 52X or greater, pressing Zoom In continuously causes the zoom to stop at the maximum zoom setting of 140X. The second zoom stop remains in effect until the zoom function is reduced to less than the first zoom stop setting (52X) and the zoom button is released for one second or longer. To achieve higher zoom levels, change the maximum zoom setting.

Procedure 5-3 Configuring the 35X Camera Zoom Stop settings

1 Select **PTZ Configuration** from the **Camera** menu.

2 In the Zoom Stops section use the slider to change the First Zoom Stop setting. The slider bar can be moved left or right using the mouse or for fine adjustments using the left and right arrow keys on the PC keyboard. The default first stop zoom setting is 52X.

- Select 35 to set the first zoom stop to 35X magnification.
- Select 52 to set the first zoom stop to 52X magnification.

3 Use the slider to change the Max Total Zoom X setting. The Max Zoom setting should always be higher than the First Zoom setting. The default maximum zoom setting is 140X.

4 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Freeze Frame

If you need to maintain a static image when calling automatic functions, such as presets or patterns, use the Freeze Frame setting. This prevents the dome movement and lens adjustments being displayed on-screen while the preset or pattern is being found.

When the Freeze Frame setting is enabled, the scene currently displayed on the monitor will be preserved (frozen) on-screen until the pattern or preset is ready for display. The image then switches smoothly to the new scene. You may want to use this setting if using a digital video recorder.

The Freeze Frame feature allows the current image to be maintained on-screen when switching to a preset or pattern. If presets or patterns are included as part of a sequence or tour, the total movement and lens adjustment time should be included as part of the dwell time to ensure that the scene will be displayed before moving to the next scene.

Procedure 5-4 Configuring the Freeze Frame function

This prevents the display of the dome movement and lens adjustments from being displayed on-screen while the preset or pattern is being found.

1 Select **PTZ Configuration** from the **Camera** menu.

2 In the Freeze Frame section select the check box to enable or disable the function. The default setting is disabled.

3 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Return Settings

When calling a Preset, the dome adopts the settings (both only available on 35X cameras) uniquely created for that Preset. When an operator moves the dome from its Preset position, the dome can return to global settings only if programmed to do so through the Return to Auto screen.

Return to Auto Focus/Auto Iris

The automatic focus will keep the scene displayed in focus and will make the necessary changes to ensure this is maintained. Sometimes, however, it may be necessary to disable the automatic focus and use manual focus to bring a subject or area into greater clarity. When manual focus is enabled by the user the automatic focus is disabled.

As long as the camera continues to view the same scene, no change is made to the auto focus. However, when the camera viewpoint moves away (about half a screen width, and more than a few seconds) from the point at which the focus was manually adjusted, when return to auto focus is enabled the system software automatically switches auto focus back on.

Return to Previous

Return to previous is similar to return to Auto Focus and Auto Iris but is associated with presets and sequences.

When a preset is selected the various settings that have been determined for that preset are also used, this can include, white balance, shutter limit, brightness and contrast to name a few. Just as with Return to Auto Focus, the camera saves various camera settings when it is about to go start a preset. Once the viewpoint moves away from the preset position by a sufficient amount (about half a screen width, and more than a few seconds), the saved settings are restored, the display will return to the way it was before the preset was selected.

The same situation applies when a sequence is run. The camera settings before the first preset is started are saved. When the user interrupts the sequence by moving the camera manually, the saved settings are reapplied.

Procedure 5-5 Configuring the Return Settings

Reinstate global camera settings after viewing a preset.

1 Select **PTZ Configuration** from the **Camera** menu.

2 In the Return Settings section select the check boxes to either enable or disable each function as the global camera default:

- **Return to Auto Focus**
- **Return to Auto Iris**
- **Return to Previous**

The default setting of these functions is enabled.

3 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Current Home Position

The home position is a preset, pattern or scan/sequence that automatically runs after a designated period of dome inactivity. Use this option if you want to keep a specific area under surveillance when the dome is not moving.

If a home position has been set on the camera the information will be displayed. You also have the option to clear the current home position.

Procedure 5-6 Display Current Home Position

1 Select **PTZ Configuration** from the **Camera** menu.

2 If a home position has been set the details will be displayed in the Current Home Position section. If no home position has been set the text boxes will be empty.

3 Use the slider bar to select the Return Time in minutes. The slider bar can be moved left or right using the mouse or for fine adjustments using the left and right arrow keys on the PC keyboard. The default setting is 5 minutes.

4 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Procedure 5-7 Clear the Current Home Position

1 Select **PTZ Configuration** from the **Camera** menu.

2 In the Current Home Position select the Clear Home check box to clear the home settings.

3 Use the **Apply** or **Refresh** button at the bottom of the page to either save or cancel the settings.

Overlay Settings

Use this section to display dome status information, enable or disable the display of all name information and display direction information about where the dome is pointing.

When Overlay Settings is selected from the Camera menu. Figure 5-1 the Overlay Settings screen will be displayed.

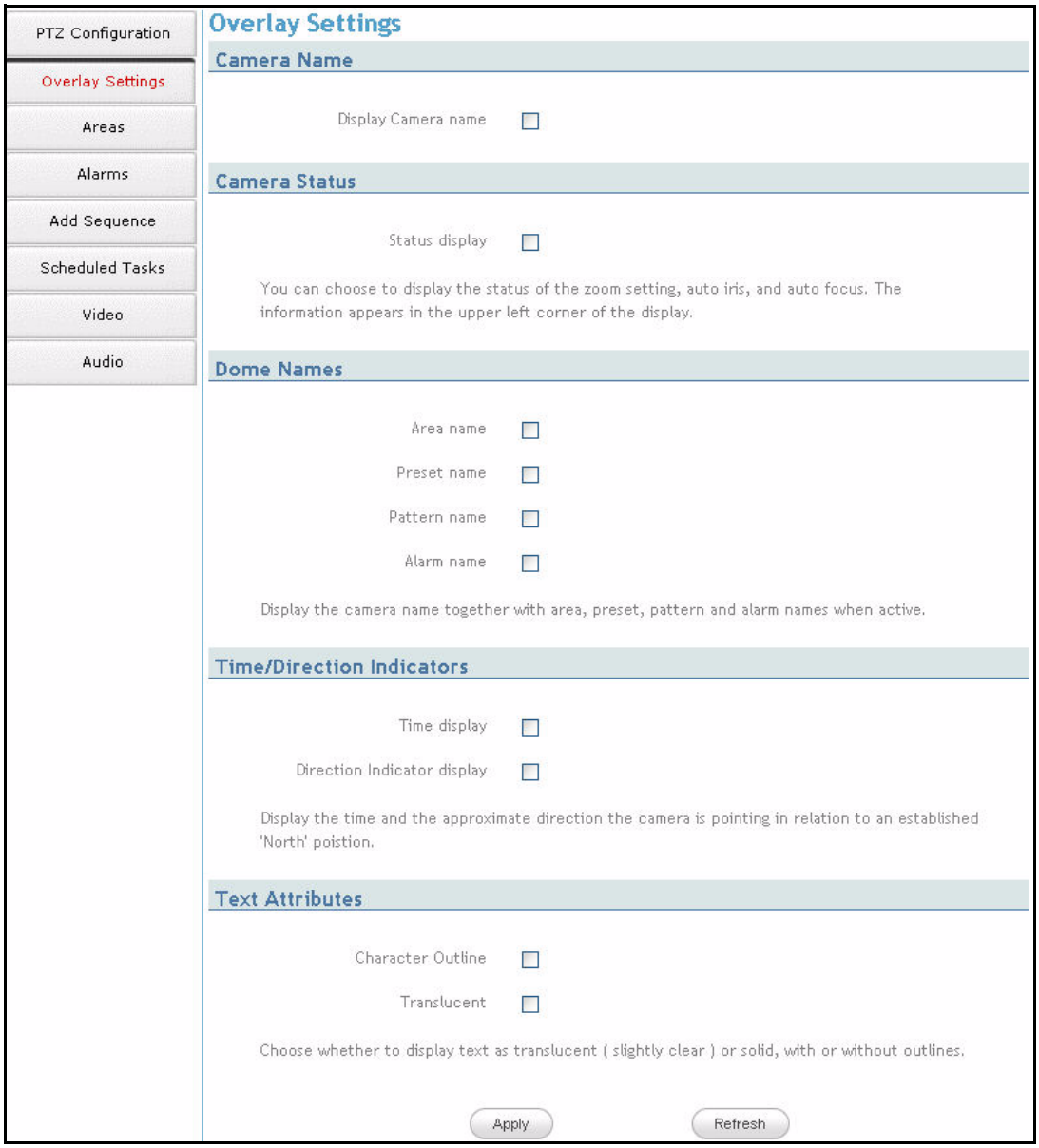

PTZ Configuration
Overlay Settings
Areas
Alarms
Add Sequence
Scheduled Tasks
Video
Audio
Overlay Settings
Camera Name
Display Camera name
Camera Status
Status display
You can choose to display the status of the zoom setting, auto iris, and auto focus. The information appears in the upper left corner of the display.
Dome Names
Area name
Preset name
Pattern name
Alarm name
Display the camera name together with area, preset, pattern and alarm names when active.
Time/Direction Indicators
Time display
Direction Indicator display
Display the time and the approximate direction the camera is pointing in relation to an established 'North' poistion.
Text Attributes
Character Outline
Translucent
Choose whether to display text as translucent (slightly clear) or solid, with or without outlines.
Apply
Refresh

Figure 5-1 Overlay Settings screen

Camera Name

Choose whether or not to display the camera name in the on-screen display.

Procedure 5-8 Display the Camera Name

1 Select **Overlay Settings** from the **Camera** menu.

2 In the Camera Name section select the Display Camera Name to enable or disable the camera name display. The default setting is disabled.

The Camera Name is defined in Procedure 6-51 Setting the Camera Name.

3 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Camera Status

You can choose to display the status of the zoom setting, auto iris, and auto focus. This information appears in the upper left corner of the monitor. The information only appears when there is a change in the status of any item and remains on the screen for five seconds. If “D” appears next to the zoom factor, the digital zoom is active.

Note

If Display Camera Name has been disabled, the status information still appears if Status Display has been enabled.

Procedure 5-9 Configuring the Camera Status display

1 Select **Overlay Settings** from the **Camera** menu.

2 In the Camera Status section select the check box to enable or disable the status display. The default setting is disabled.

3 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Dome Names

You can choose to display the area, preset, pattern and alarm names on the dome when they are active.

Procedure 5-10 Configuring the Dome Names

1 Select **Overlay Settings** from the **Camera** menu.

2 In the Dome Names section select the check boxes to enable or disable the following functions when they are active:

- **Area name**
- **Preset name**
- **Pattern name**
- **Alarm name**

The default setting for these functions is disabled.

3 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Time/Direction Indicators

Display the time, and the approximate direction the dome is pointing in relation to its established “North”. The north position is defined using Procedure 4-47 Set North Position.

When enabled, the Direction Indicators appear along the top edge of the display. In addition, a tilt elevation indicator also appears along the left edge of the display. The value of the tilt elevation

indicator is relative to the “virtual horizon” of 0° tilt. Figure 5-2 illustrates the locations of the Direction Indicators on the display.

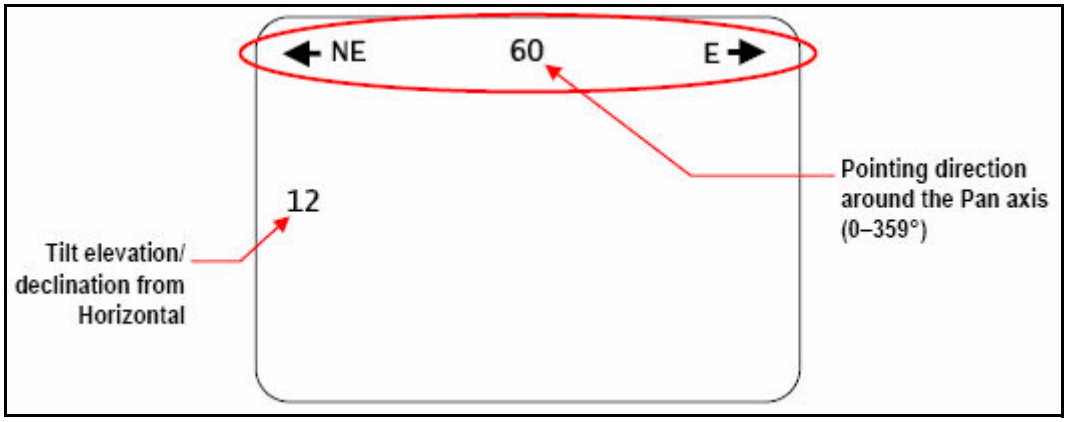


Figure 5-2 Screen locations for Direction Indicators

In this example, the current pointing position is 60° from North. The tilt elevation is 12° above the virtual horizon. Panning to the left points the dome towards the Northeast. Panning to the right points the dome towards the East. If you tilt below the virtual horizon, the negative values will be displayed along the left edge (for example -25°). The elevation values range from +22° to -90°.

Procedure 5-11 Configuring the Time and Direction Indicators

1 Select **Overlay Settings** from the **Camera** menu.

2 In the Time/Direction Indicators section select the check boxes to enable or disable the following functions:

- **Time display**
- **Direction Indicator display**

The default setting for these functions is disabled.

3 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Text Attributes

Choose whether to display text as translucent (slightly clear) or solid, and with or without outlines. If the video background is light, enable character outlines. If on-screen text obscures the video being displayed, enable translucent names. Character outlines and translucent names may be used together to best suit your video environment.

Figure 5-3 illustrates the type of text attributes available.

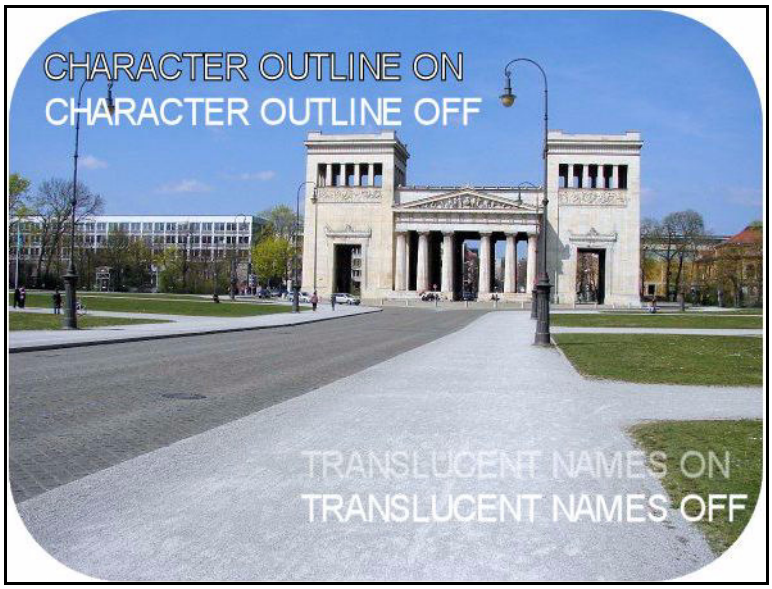


Figure 5-3 Examples of text attributes

Procedure 5-12 Configuring the attributes of displayed text

1 Select **Overlay Settings** from the **Camera** menu.

2 In the Text Attributes section select the check boxes to enable or disable the characteristics of the displayed text. Choose whether to display text as translucent (slightly clear) or solid, with or without outlines.

- **Character Outline**
- **Translucent**

The default setting for these functions is disabled.

3 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Areas

The following provides information on configuring Areas.

Areas List

Areas allow sections within the field of view to be labeled. These labels may then be turned on within the Overlay Settings option. Areas may not overlap. The zoom level affects the size areas may appear. You may program from two to 16 areas.

When Areas is selected from the Camera menu. Figure 5-4 the Areas screen will be displayed.

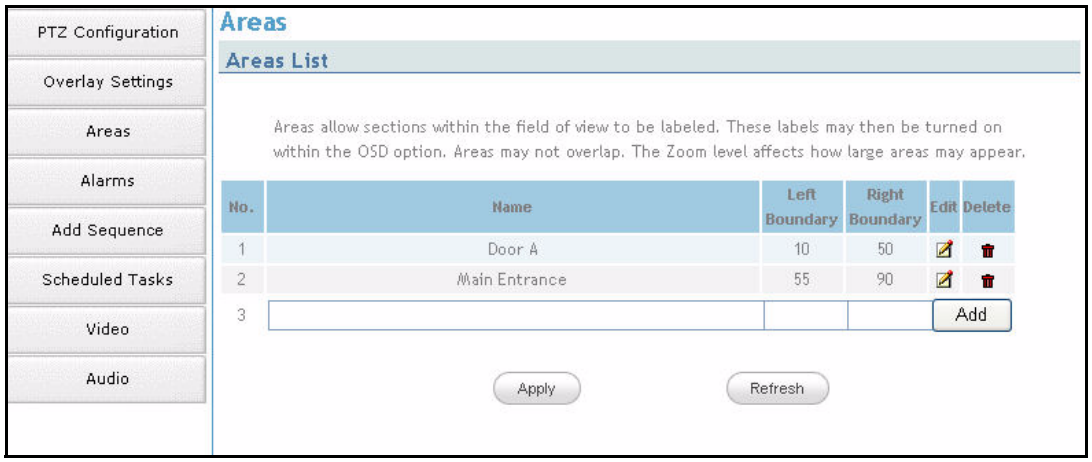


Figure 5-4 Areas screen

If the dome is installed in a location where you can see numerous departments or other identifiable objects, programming area boundaries might be useful. Areas are programmed start and end points of a camera's field of view. Each area is a part of a circular viewing area that extends around the dome.

For example, Figure 5-5 represents the floor plan of a break room. The room includes a main entrance, tables with chairs, vending machines, lockers, and an emergency exit. Areas have been programmed around the fixtures in the room. As shown in this example, areas can be different sizes.

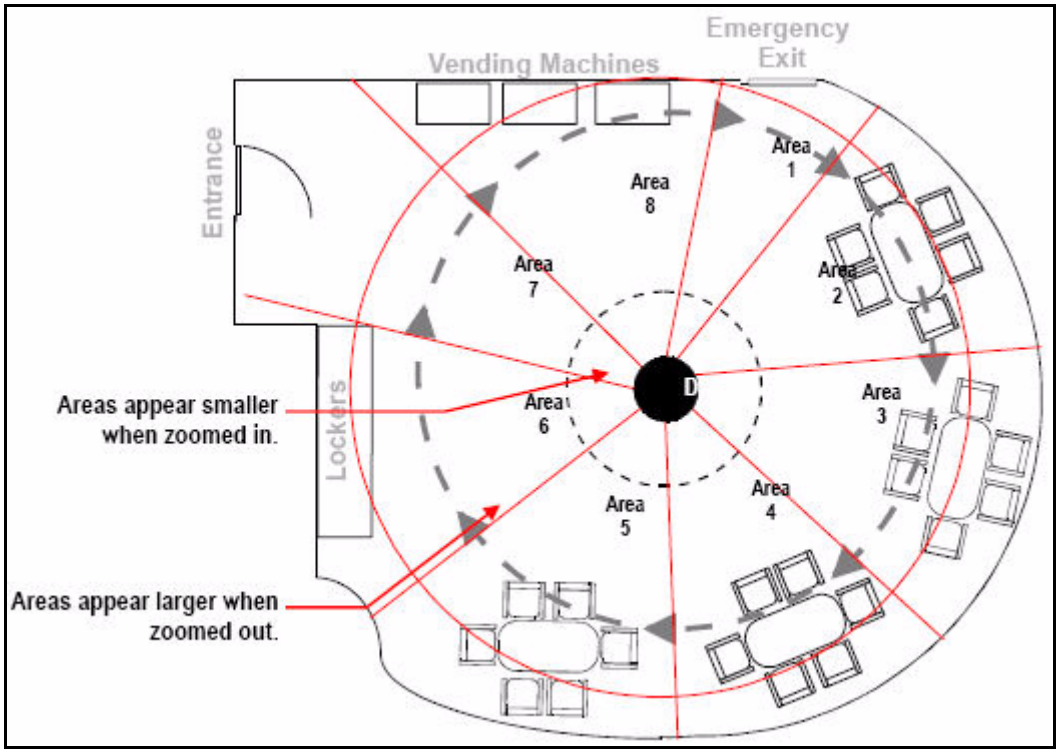


Figure 5-5 An example of areas

The ending point of one area is the starting point for the next area. The ending point of the last area cannot go past the starting point of the first area. In this example, the area that includes the vending machines cannot extend past the starting point of the area that includes the emergency exit. If your controller supports areas, these are separate from the areas you can program with the dome. You should not use both the controller and the configuration utility to define areas.

The zoom level also affects how large areas appear. When you zoom in to an area, the area may appear to be small. When you pan the dome, area boundaries may appear to be close. However, if you zoom out, the area appears to be larger. When you pan the dome, the area boundaries appear further apart. With this in mind, it will be easier to establish area boundaries if the zoom level is small than if the zoom level is large.

Procedure 5-13 Programming Areas

1 Select **Areas** from the **Camera** menu.

2 Enter a name of the area you are programming in the Name text box.

3 Enter the left boundary, in degrees, in the Left Boundary text box. Values range from 0 to 359.

Note

This must not be less than the right boundary of the previous area.

4 Enter the right boundary in degrees in the Right Boundary text box.Values range from 0 to 359.

Note

This must not be greater than the next area's left boundary.

5 Select the **Add** button.

6 Repeat steps 2–5 until you have finished programming boundaries (up to 16 can be set).

7 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Procedure 5-14 Editing Areas

1 Select **Areas** from the **Camera** menu.

2 Select the Edit icon of the area you would like to change.

3 Make your changes.

4 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Procedure 5-15 Deleting Areas

1 Select **Areas** from the **Camera** menu.

2 Select the Delete icon of the area you would like to delete.

3 You will be prompted to confirm the deletion. Select the **OK** button to confirm or the **Cancel** button to stop the deletion.

Alarms

The camera can be commanded to carry out a specified operation when a alarm is triggered. The following provides information on setting Alarms.

Note

Scheduled tasks, alarms and manual dome camera control will always begin when they are selected or scheduled to start. None of these camera actions have a priority over the other. If a camera action is in progress and a new action is selected or activated the previous action will stop before the new action is started.

Alarm Actions

The dome provides four alarm inputs. By connecting alarm devices, such as smoke alarms, twilight sensors, or motion sensors, to these inputs, you can enhance the usability of your video surveillance system. You can further improve your video surveillance by assigning a dome action, such as a preset or pattern, to start whenever an alarm input changes from normal to abnormal.

When Alarms is selected from the Camera menu. Figure 5-6 the Alarms screen will be displayed.

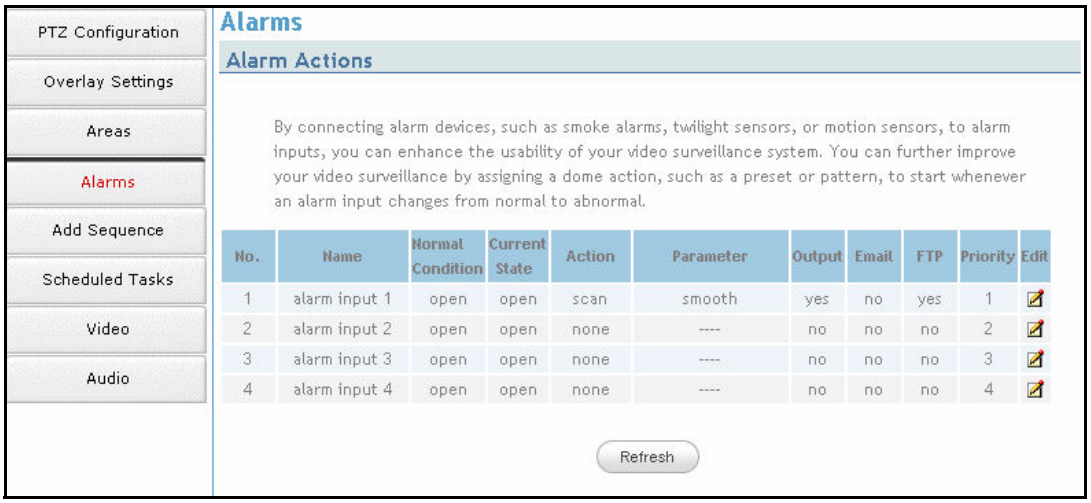

PTZ Configuration
Overlay Settings
Areas
Alarms
Add Sequence
Scheduled Tasks
Video
Audio
Alarms
Alarm Actions
By connecting alarm devices, such as smoke alarms, twilight sensors, or motion sensors, to alarm inputs, you can enhance the usability of your video surveillance system. You can further improve your video surveillance by assigning a dome action, such as a preset or pattern, to start whenever an alarm input changes from normal to abnormal.
No. Name Normal Condition Current State Action Parameter Output Email FTP Priority Edit
1 alarm input 1 open open scan smooth yes no yes 1
2 alarm input 2 open open none ---- no no no 2
3 alarm input 3 open open none ---- no no no 3
4 alarm input 4 open open none ---- no no no 4
Refresh

Figure 5-6 Alarms screen

Use this screen to assign a preset, pattern, sequence or scan to occur whenever the alarm's input state changes from normal to abnormal. You may also choose to have no action occur when the alarm's input state changes.

Alarms can be processed internally by the dome, externally by the controller, or both. If the changes in input state are sent to the host controller, the host actions have higher priority than the associated dome actions.

Note

An active internal alarm only resets when the input state changes to “normal.” A manual reset is not available.

Note

Enabling Email or FTP of video or pictures requires a MJPEG video stream. One will be started if a suitable stream does not already exist, which may affect the performance of other video streams.

Note

A Micro SD Card must be inserted to send video files and images from triggered alarms.

Procedure 5-16 Configuring Alarm Actions

1 Select **Alarms** from the **Camera** menu.

2 Select the Edit icon for the alarm you would like to configure. Figure 5-7 the Edit Alarm screen will be displayed.

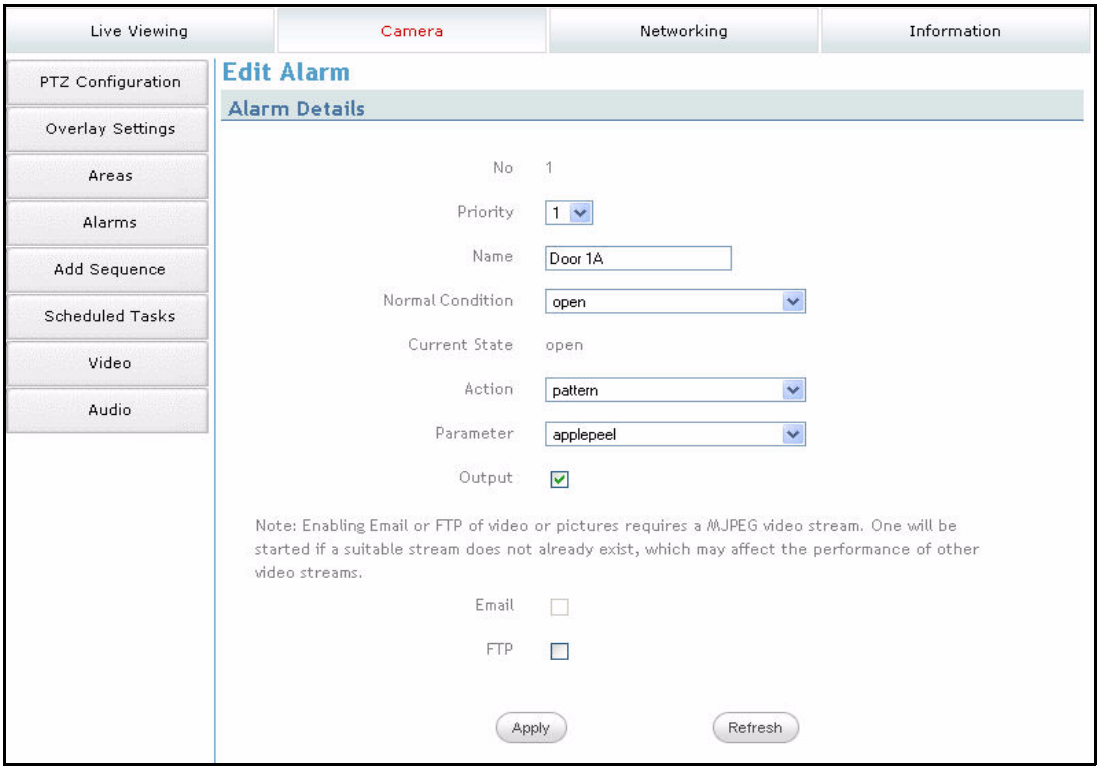


Figure 5-7 Edit Alarms screen

3 From here you can edit the:

- Priority - select a priority from 1 to 4, 1 has the highest priority and 4 has the lowest. If two alarms happen at the same time, priority 1 will take precedence over priority 2.
- Name - a name for the alarm condition
- Normal Condition - make a selection from: open or closed
- Action – make a selection from: preset, pattern, sequence, scan or none.

- Parameter - only selectable if an action has been selected. Choose the preset, pattern, sequence or scan to run when the alarm has been triggered.
- Output – check box to activate the digital output as a action. For example, this digital output could be linked to a electrical device, i.e. a security light or siren.
- Email – check box to send an email to the user configured in STMP Settings.

  Refer to Procedure 6-38 Configuring the Email Settings if SMTP settings have not been defined.
- FTP - check box to send a file to the FTP details configured in FTP Settings.

  Refer to Procedure 6-40 Configuring Remote Settings and Authentication if FTP settings have not been defined.

  Refer to Procedure 5-17 FTP Details for Alarm to determine the type of file to be sent.

4 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Procedure 5-17 FTP Details for Alarm

Note

AVI clips can only be sent via FTP if a Micro SD Card has been installed. Refer to the printed Quick Start Guide for information on how to install a micro SD card.

When FTP is enabled in the Alarm Details section. Figure 5-8 the FTP Details section screen will be displayed. Use this screen to edit the details of the alarm file to be sent via FTP.

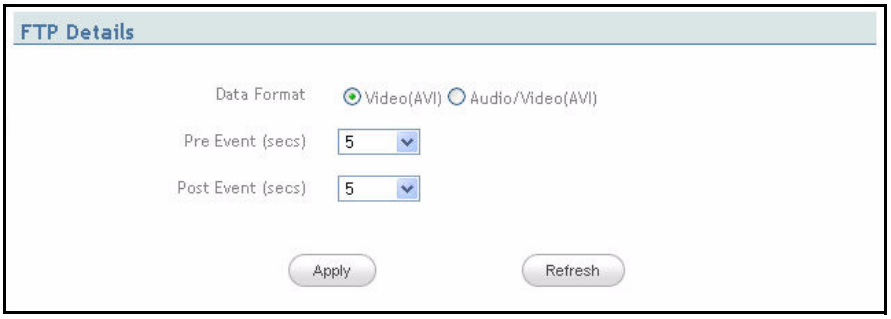


Figure 5-8 FTP Details screen

1 Select your Data Format by checking one of the radio buttons:

- **Video (AVI)** - a playable movie containing MJPEG video. Refer to Procedure 5-25 Configuring Alarm Video Settings to modify the settings for the video (avi) file.
- **Audio/Video (AVI)** - a playable movie containing MJPEG video and WAV audio.

2 Select the Pre Event duration in seconds from the drop-down menu. Values range from 0 to 10. The default setting is 5 seconds.

3 Select the Post Event duration in seconds from the drop-down menu. Values range from 0 to 10. The default setting is 5 seconds.

4 Select **Apply** to keep your choices.

5 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Add Sequence

The following provides information on configuring sequences.

Sequence Names

A Sequence is a sequential display of multiple camera Presets. Sequences provide a methodical and effective way to monitor multiple areas of interest by switching to different Presets automatically.

Sequences are created by identifying Preset views to include in the Sequence and specifying a dwell time that controls how long each Preset remains on-screen before switching to another Preset. Up to 16 Sequences can be created, each with 16 steps (Presets). To create a preset refer to Procedure 4-15 Adding a Preset.

When Sequences is selected from the Camera menu.Figure 5-9 the Add Sequence screen will be displayed.

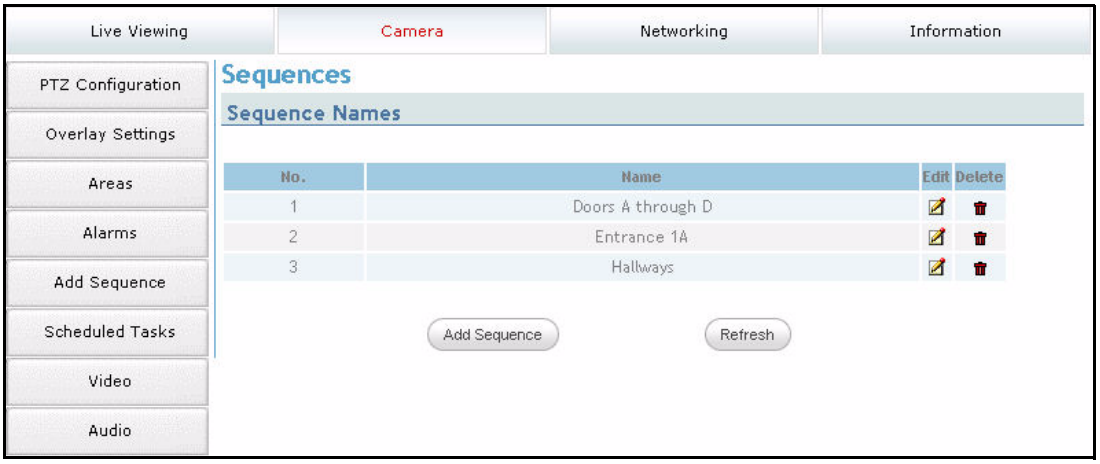


Figure 5-9 Sequence Names screen

Procedure 5-18 Add a Sequence

1. If no presets have been created, follow Procedure 4-15 Adding a Preset before continuing to step 2.
2. Select **Add Sequence** from the **Camera** menu. Figure 5-9 the Sequence Name screen will be displayed.

3 Select the **Add Sequence** button. Figure 5-10 the Add Sequence Screen will appear.

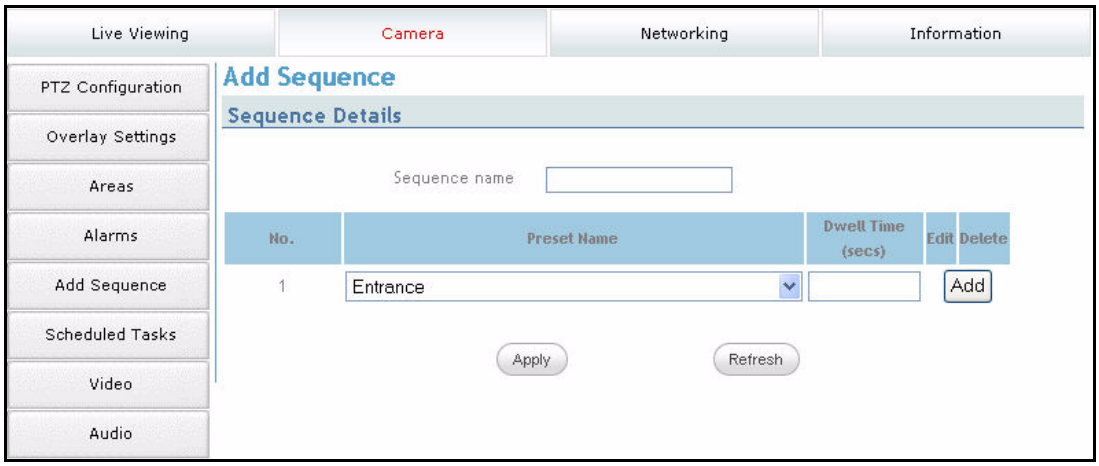


Figure 5-10 Add Sequence Screen

4 Enter a Sequence Name in the text box.

5 Select a preset from the Preset Name drop-down menu.

6 Enter a Dwell Time in seconds in the text box. The values range from 5 to 600 seconds.

7 Select the **Add** button. The preset is now listed as part of the sequence.

8 Repeat steps 5 and 6 to add further presets to the sequence.

Note

Up to 16 presets can be added to a sequence.

9 Once you have finished, use the **Apply** or **Refresh** button at the bottom of the page to either save or cancel the settings.

The sequence will now appear on the **Select Sequence** and **Delete Sequence** drop-down menus.

Procedure 5-19 Editing a Sequence

1 Select **Sequences** from the **Camera** menu. Figure 5-9 the Sequences Name screen will be displayed.

2 Select the Edit icon of the sequence you would like to edit. Figure 5-11 the Sequence Details screen will be displayed which shows details of the presets included within the sequence.

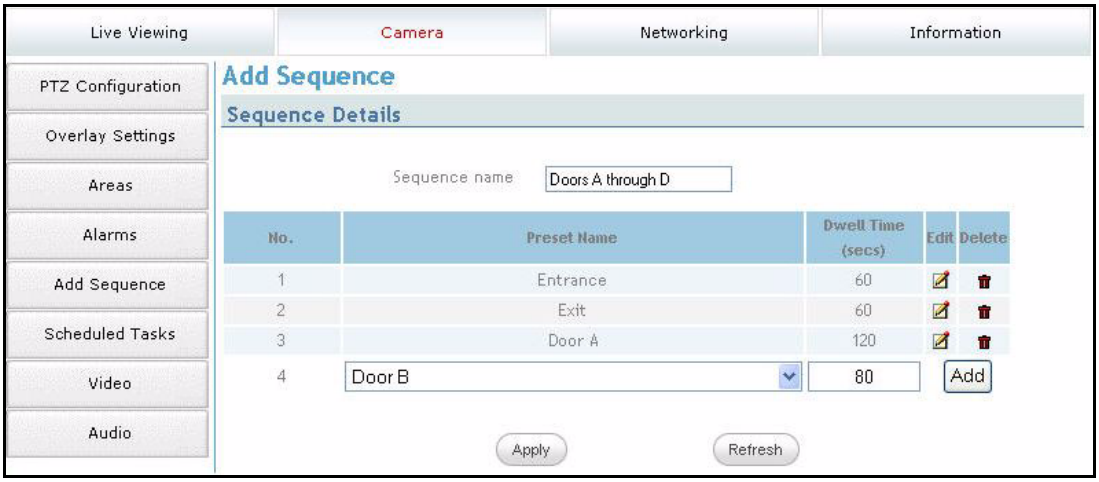


Figure 5-11 Sequence Details screen

3 You can now make any necessary changes to the sequence.

- To edit an existing preset select the edit icon of the preset you would like to edit. You are now able to select a different Preset Name and change the Dwell Time.
- To add a new preset, move to the next available free slot and select a preset from the Preset Name drop-down menu and enter a Dwell Time.

Select the **Add** button to confirm the change.

4 Repeat step 3 to make further edits to the sequence.

5 Once you have finished, use the **Apply** or **Refresh** button at the bottom of the page to either save or cancel the settings.

Procedure 5-20 Delete a Sequence

1 Select **Sequences** from the **Camera** menu. Figure 5-9 the Sequences Name screen will be displayed.

2 Select the Delete icon of the sequence you would like to delete.

3 You will be prompted to confirm the deletion. Select the **OK** button to confirm or the **Cancel** button to stop the deletion.

Scheduled Tasks

Schedule tasks to include specific situations or events; you can set up a regular schedule or a custom schedule. For example, you could set the same schedule for all cameras, every day of the week, or set custom schedules for weekday, weekend, and holiday operation for each camera.

Note

Changing the schedule can affect the recording's duration. Use defaults when possible.

Note

Scheduled tasks, alarms and manual dome camera control will always begin when they are selected or scheduled to start. None of these camera actions have a priority over the other. If a camera action is in progress and a new action is selected or activated the previous action will stop before the new action is started.

Task Details

When you select Scheduled Tasks from the Camera menu. Figure 5-12 the Scheduled Tasks screen will be displayed.

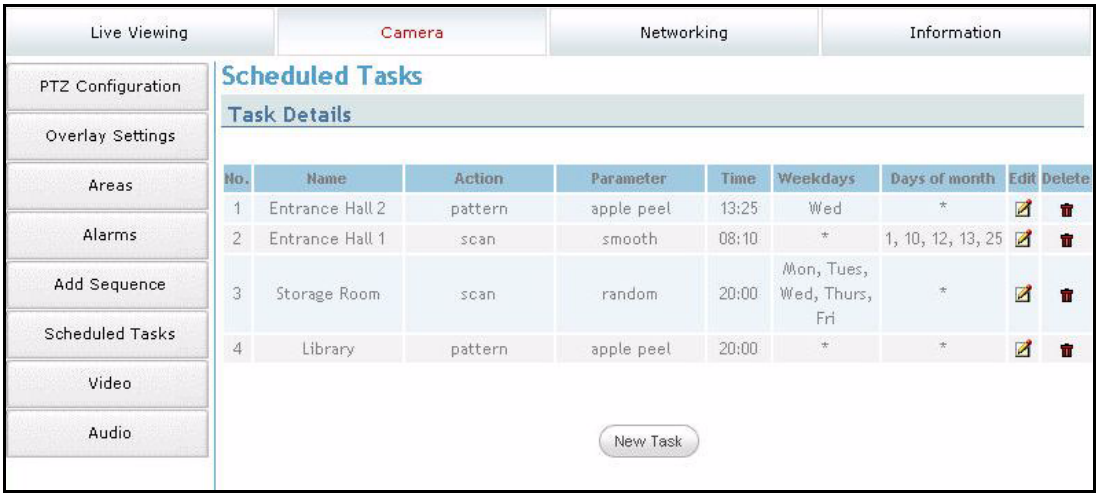


Figure 5-12 Scheduled Tasks screen

Procedure 5-21 Creating a Scheduled Task

1 Select **Scheduled Tasks** from the **Camera** menu.

2 Select the **New Task** button. Figure 5-13 the Schedule/Edit Task screen will be displayed.

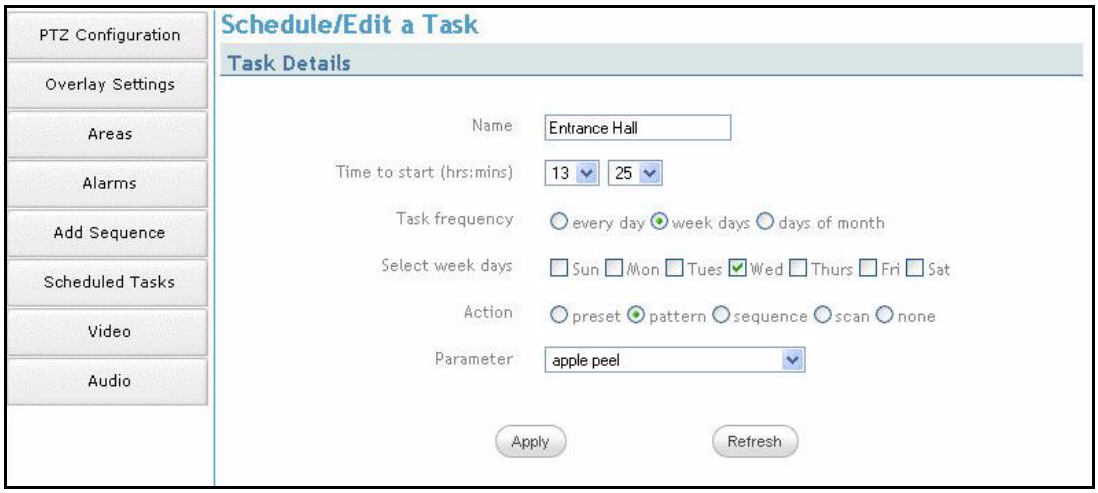


Figure 5-13 Schedule/Edit a Task

3 Enter a Name for the task in the text box.

4 Select the start time of the task, use the 24hr clock: hh:mm.

5 Select the task frequency, select from every day, week days or days of month.

If week days has been selected you will be required to choose the days on which days the task will run. Select the check box beside the day to add that day to the task frequency.

If days of month has been selected you will be required to enter the a numerical value for the day separated by a comma. For example, to run on the 4th, 10th, 21st and 25th days of the month enter 4,10,21,25.

6 Select the action, choose none or a programmed preset, pattern, sequence or scan.

If an action is selected choose the type from the Parameter drop-down menu.

7 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Procedure 5-22 Editing a Scheduled Task

1 Select **Scheduled Tasks** from the **Camera** menu.

2 Select the Edit icon of a task you would like to edit. Figure 5-13 the Schedule/Edit Task screen will be displayed.

3 Here you can edit:

- Name
- Task Start Time (use 24hr clock: hh:mm)
- Task Frequency
- Which days the task should run
- Action: Preset, Pattern, Sequence or Scan.

4 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Procedure 5-23 Deleting a Scheduled Task

1 Select **Scheduled Tasks** from the **Camera** menu.

2 Select the Delete icon of the scheduled task you would like to delete.

3 You will be prompted to confirm the deletion. Select the **OK** button to confirm or the **Cancel** button to stop the deletion.

Video

Video allows you to select the video preferences for ACC Frame Rate, Alarm Video Settings and RTSP Timeout.

When Video is selected from the Camera menu. Figure 5-14 the Video screen will be displayed.

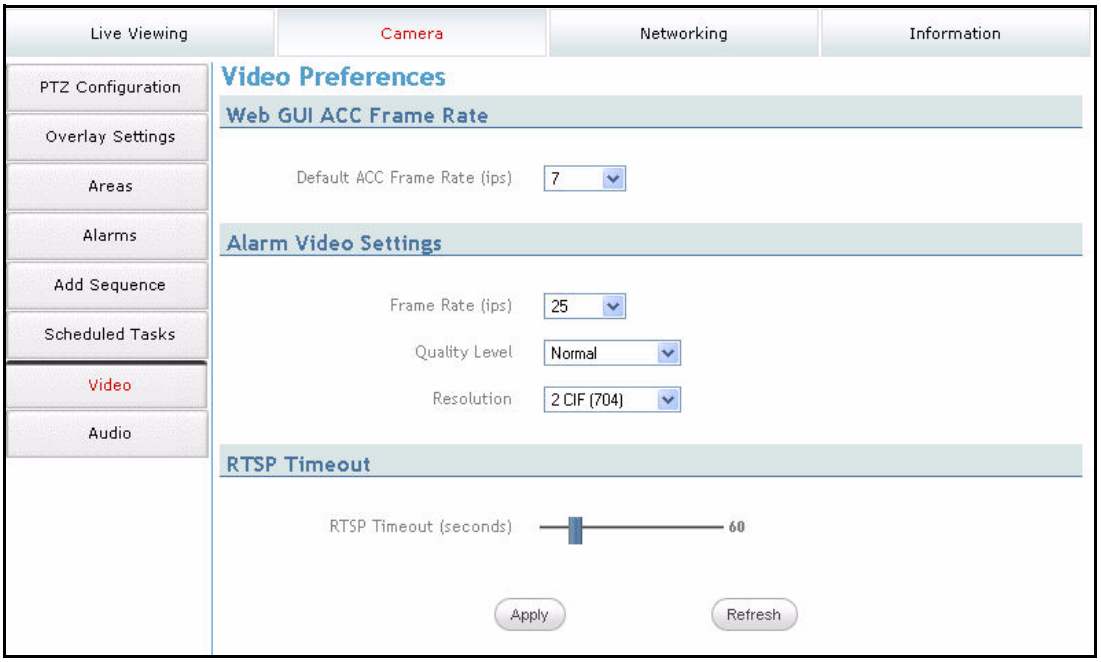


Figure 5-14 Video screen

Procedure 5-24 Configuring the Web GUI ACC Frame Rate

1 Select **Video** from the **Camera** menu.

2 In the Web GUI ACC Frame Rate section select the Default ACC Frame Rate (ips) from the drop-down menu. The values range from 1 to 25 (PAL) and 1 to 30 (NTSC). The default setting is 7.

Note

Changing the ACC Frame Rate only affects what is being displayed on the Live Web Video pane. Changing these settings does not affect the video being sent by the IP Dome.

3 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Procedure 5-25 Configuring Alarm Video Settings

1 Select **Video** from the **Camera** menu.

2 In the Alarm Video Settings section select the Default ACC Frame Rate (ips) from the drop-down menu. The values range from 1 to 25 (PAL) and 1 to 30 (NTSC). The default setting is 25.

3 Select the Quality Level from the drop-down menu.

- **Extended**
- **Normal**
- **Super**

The default setting is ‘normal’.

4 Select the Resolution from the drop-down menu.

When using PAL, the resolution options are:

- **QVGA (320 x 240)**
- **1 CIF (352 x 288)**
- **HVGA (640 x 240)**
- **2CIF (704 x 288)**
- **VGA (640 x 480)**
- **4CIF (704 x 576)**
- **D1 (720x576)**

The default PAL resolution is set to 2CIF (704 x 288).

When using NTSC, the resolution options are:

- **QVGA (320 x 240)**
- **1 CIF (352 x 240)**
- **HVGA (640 x 240)**
- **2CIF (704 x 240)**
- **VGA (640 x 480)**
- **4CIF (704 x 480)**
- **D1 (720x480)**

The default NTSC resolution is set to 2CIF (704 x 240).

5 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Procedure 5-26 Setting RSTP Timeout

1 Select **Video** from the **Camera** menu.

2 In the RTSP Timeout section use the slider to select the RTSP Timeout in seconds. The slider bar can be moved left or right using the mouse or for fine adjustments using the left and right arrow keys on the PC keyboard. The values range from 10 to 300. The default setting is 60.

3 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Audio

Audio allows you to configure the Audio Input and Audio Out.

When Audio is selected from the Camera menu. Figure 5-15 the Audio screen will be displayed.

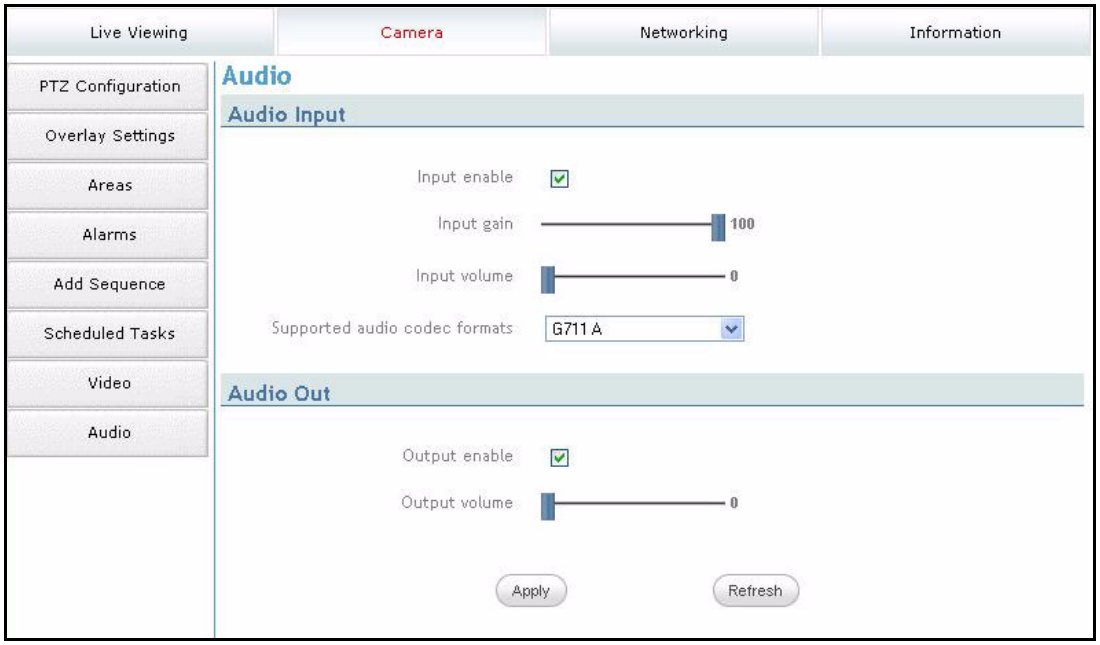


Figure 5-15 Audio screen

Procedure 5-27 Configuring Audio Input

1 Select **Audio** from the **Camera** menu.

2 In the Audio Input section use the check box to enable or disable the Input enable function. The default setting is disabled.

3 Use the slider to select the Input gain. The slider bar can be moved left or right using the mouse or for fine adjustments using the left and right arrow keys on the PC keyboard. The values range from 1 to100. The default setting is 100.

4 Use the slider to select the Input Volume. The values range from 1 to 100. The default volume is set to 50.

5 Use the drop-down menu to select the Supported audio codec formats.

- **PCM**
- **G711 A**
- **G711 U**

The default setting is ‘PCM’.

6 Once you have made your changes, use the **Apply** or **Refresh** button at the bottom of the page to either save or cancel the settings.

Procedure 5-28 Configuring Audio Out

1 Select **Audio** from the **Camera** menu.

2 In the Audio Out section use the check box to enable or disable the Output enable function. The default setting is disabled.

3 Use the slider to select the Output Volume. The slider bar can be moved left or right using the mouse or for fine adjustments using the left and right arrow keys on the PC keyboard. The values range from 1 to 100. The default volume is set to 50.

4 Once you have made your changes, use the **Apply** or **Refresh** button at the bottom of the page to either save or cancel the settings.

Date Time

Set the camera's time and date format.

When Date Time is selected from the Networking menu. Figure 6-16 the Date Time screen will be displayed.

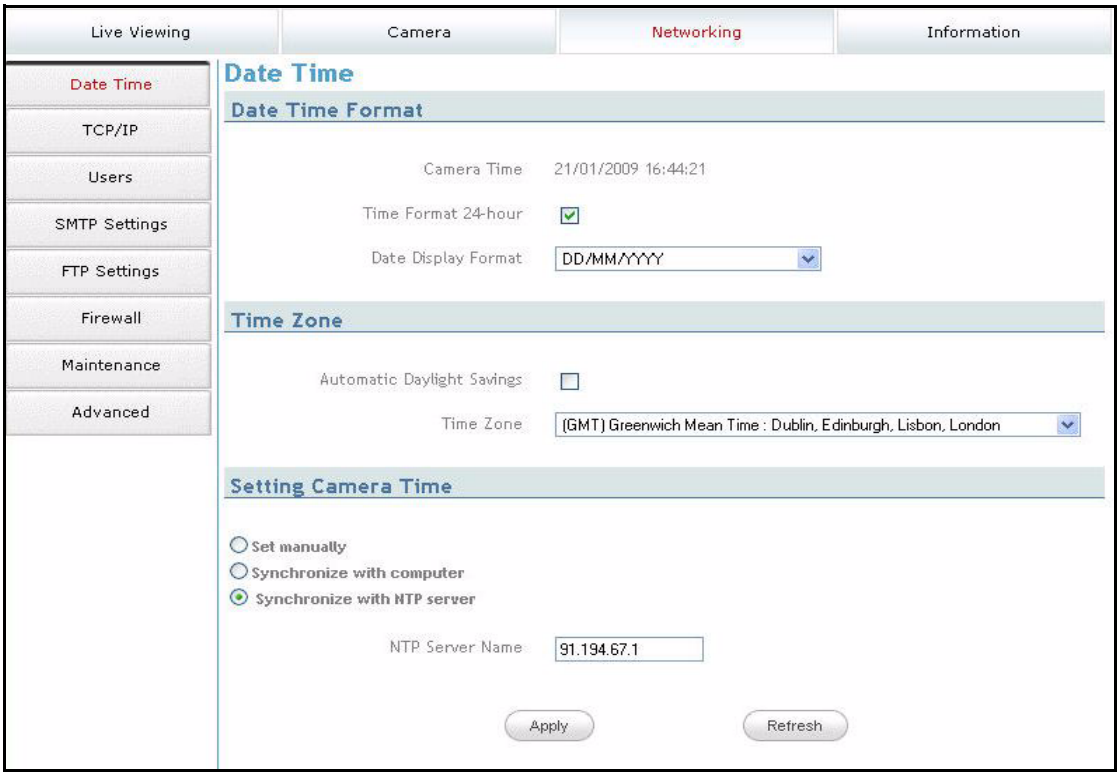


Figure 6-16 Date Time screen

Date Time Format

Set the format of the date and time.

Procedure 6-29 Configuring the Time format 24-Hour

1. Select **Date Time** from the **Networking** menu.
2. In the Date Time Format section, check the Camera Time. If it is incorrect it can be altered using Procedure 6-32 Setting the Camera Time.
3. Use the check box to enable or disable the Time Format 24-Hour. The default setting is enabled.

4 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Note

If either Synchronize with computer or Synchronize with NTP Server have been selected in the Setting camera time section it will be necessary to confirm the change settings and reboot the camera. You will have to log back in to the IP Dome when it restarts, Follow Procedure 3-4 Logging in to the IP Dome.

Procedure 6-30 Configuring the Date Time Format

1 Select **Date Time** from the **Networking** menu.

2 In the Date Time Format section, check the Camera Time. If it is incorrect it can be altered using Procedure 6-32 Setting the Camera Time.

3 To change the format use the Date Display Format drop-down menu:

- **DD/MM/YYYY**
- **MM/DD/YYYY**
- **YYYY/MM/DD**

The default setting is DD/MM/YYYY.

4 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Note

If either Synchronize with computer or Synchronize with NTP Server have been selected in the Setting camera time section it will be necessary to confirm the change settings and reboot the camera. You will have to log back in to the IP Dome when it restarts, Follow Procedure 3-4 Logging in to the IP Dome.

Procedure 6-31 Configuring the Time Zone and Daylight Savings

1 Select **Date Time** from the **Networking** menu.

2 In the Time Zone section use the check box to enable or disable Automatic Daylight Savings. The default setting is disabled.

3 Select the Time Zone from the drop-down menu. The default is '(GMT) Greenwich Mean Time'.

4 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

5 When Apply is selected you will be prompted to confirm the change settings and reboot the camera. Select the **OK** button to confirm or the **Cancel** button to stop the change and reboot.

If OK was selected you will have to log back in to the IP Dome when it restarts, Follow Procedure 3-4 Logging in to the IP Dome.

Setting Camera Time

Use this section to set the time on the camera.

Procedure 6-32 Setting the Camera Time

1 Select **Date Time** from the **Networking** menu.

2 In the Setting Camera Time section select your method of setting the time by checking one of the radio buttons:

- **Set manually**
- **Synchronize with computer.**
- **Synchronize with NTP Server.**

The default is ‘Set manually’

3 If you select Set manually:

- Enter the date into the text box
- Enter the time into the text box.

4 If you select Synchronize with computer the date and time will be entered automatically.

5 If you select Synchronize with NTP Server, enter the NTP Server Name in the text box.

6 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

7 When Apply is selected you will be prompted to confirm the change settings and reboot the camera. Select the **OK** button to confirm or the **Cancel** button to stop the change and reboot.

If OK was selected you will have to log back in to the IP Dome when it restarts, Follow Procedure 3-4 Logging in to the IP Dome.

TCP/IP

Configure the DHCP, the IP address and the DNS in this section.

When TCP/IP is selected from the Networking menu. Figure 6-17 the TCP/IP screen will be displayed.

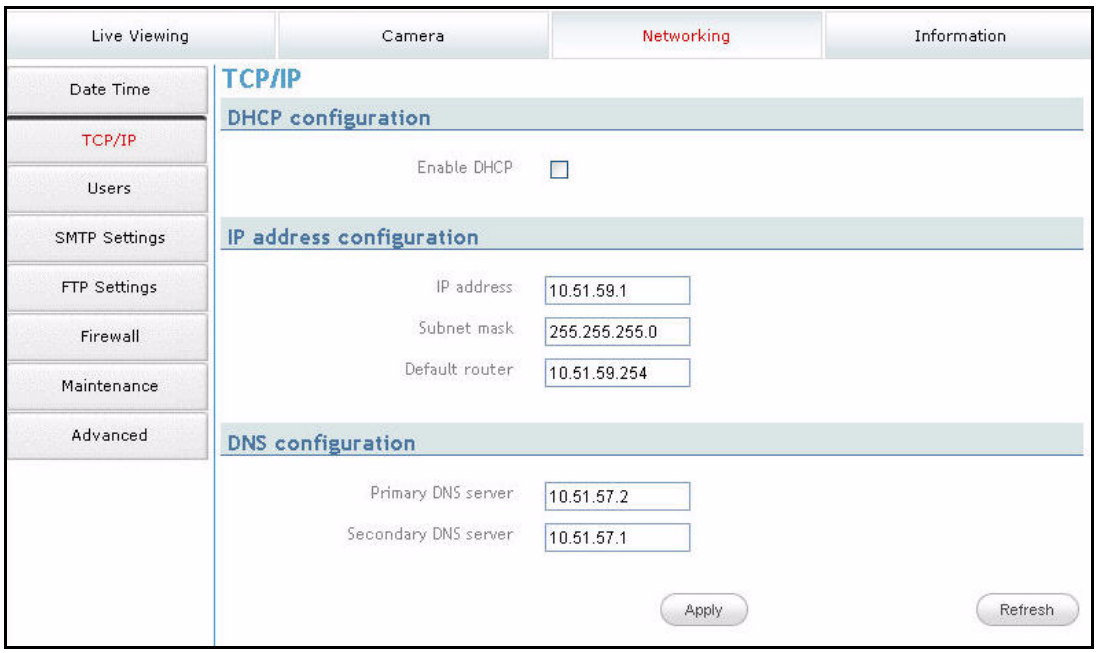


Figure 6-17 TCP/IP screen

DHCP Configuration

When a DHCP server is running on the network enabling DHCP on the camera will allow an IP address to be automatically assigned to the camera. DHCP on the IP Dome is defaulted to enabled. This ensures that when the camera is connected to a DHCP network the server will automatically assign an IP address for the camera. If DHCP is disabled the IP settings must be configured manually.

Procedure 6-33 Configuring the DHCP

1 Select **TCP/IP** from the **Networking** menu.

2 In the DHCP Configuration section use the check box to enable or disable this function. The default setting is enabled.

3 Once you have chosen your setting, use the **Apply** or **Refresh** button at the bottom of the page.

IP Address Configuration

When DHCP is disabled the IP settings can be configured manually. This allows you to manually set the IP address, the subnet mask and the default router.

Procedure 6-34 Configuring the IP Address settings

1 Select **TCP/IP** from the **Networking** menu.

2 In the IP Address Configuration section enter the IP address in the text box.

3 Enter the Subnet Mask in the text box.

4 Enter the Default Router address in the text box.

5 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Note

If you are using Bonjour for Windows a known limitation is that it is not always able to maintain an up-to-date list of IP devices. If Bonjour fails to connect to an IP Dome after the IP Address has been changed, please restart Microsoft Internet Explorer and re-select the IP Dome in the Bonjour toolbar.

DNS Configuration

Set the Domain Name System information in this section.

Procedure 6-35 Configuring the DNS

1 Select **TCP/IP** from the **Networking** menu.

2 In the DNS Configuration section enter the address of the Primary DNS Server.

3 Enter the address of the Secondary DNS Server into the text box.

4 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Users

In this section you are able to add and delete user accounts for the IP Dome. There are three levels of access: Admin, Recorder, and User.

Refer to User Accounts for more information on the access rights of each.

When Users is selected from the Networking menu. Figure 6-18 the Users screen will be displayed.

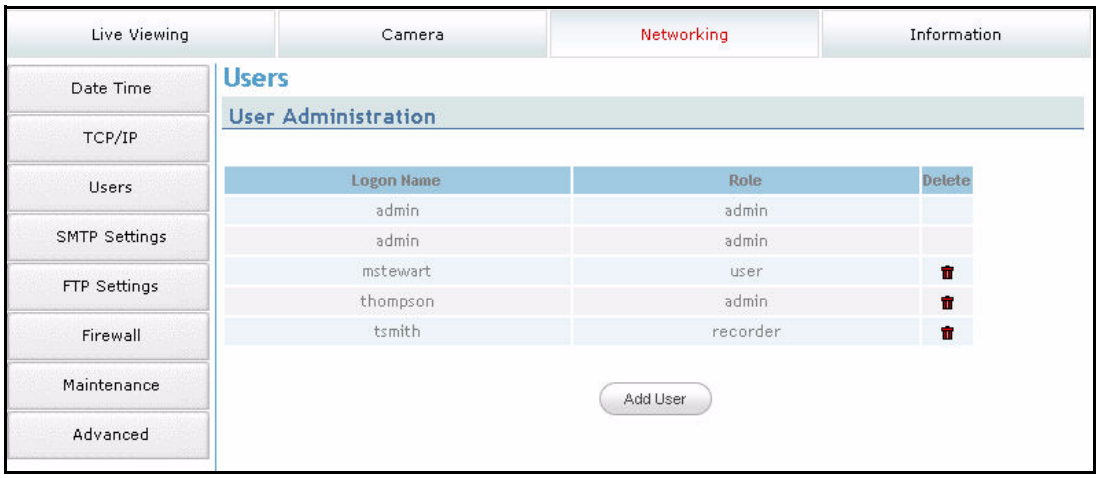


Figure 6-18 Users Administration screen

User Administration

In the User Administration section you can Add, edit or delete user accounts.

Procedure 6-36 Add a User

1 Select **Users** from the **Networking** menu. Figure 6-18 the Users screen will be displayed.

2 In the Users Administration section select the **Add User** button. Figure 6-19 the User Details screen will be displayed.

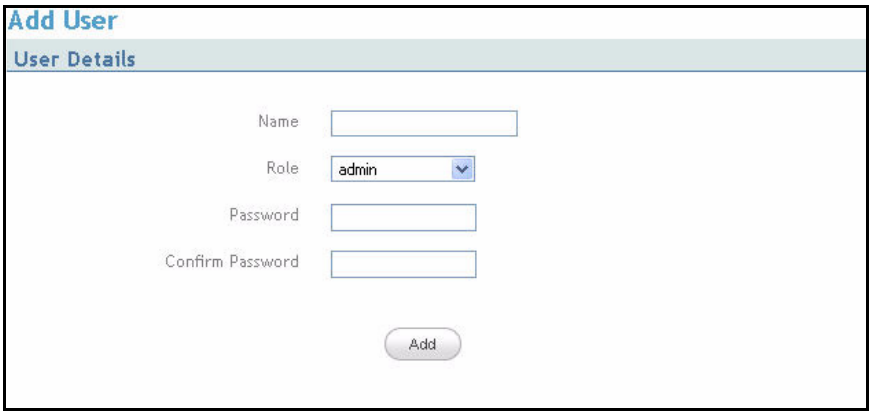


Figure 6-19 User Details screen

3 Enter a Name in the text box. This must contain string characters with a length of between 4 and 16 characters.

4 The drop-down menu under Role has three options, refer to User Accounts for more detailed information on access rights:

- Admin - has full access to the camera and settings.

- Recorder – has limited access to the camera and settings.
- User – can view Information and Live Viewing menus.

5 Enter a Password in the text box. The password is case sensitive and can contain alphanumeric characters with a length of between 4 and 20 characters.

6 Enter the same password in the Confirm Password text box.

7 Select the **Add User** button to save the account. The User Administration screen will be displayed.

Procedure 6-37 Delete a User

1 Select **Users** from the **Networking** menu. Figure 6-18 the Users screen will be displayed.

2 Locate the user in the User Administration table and click the trashcan icon to delete the account.

Note

The default account for ‘admin’ and ‘recorder’ cannot be deleted.

3 You will be prompted to confirm the deletion. Select the **OK** button to confirm or the **Cancel** button to stop the deletion.

SMTP Settings

Configure the SMTP settings to send e-mail alerts in this section.

When SMTP Settings is selected from the Networking menu. Figure 6-20 the SMTP Settings screen will be displayed.

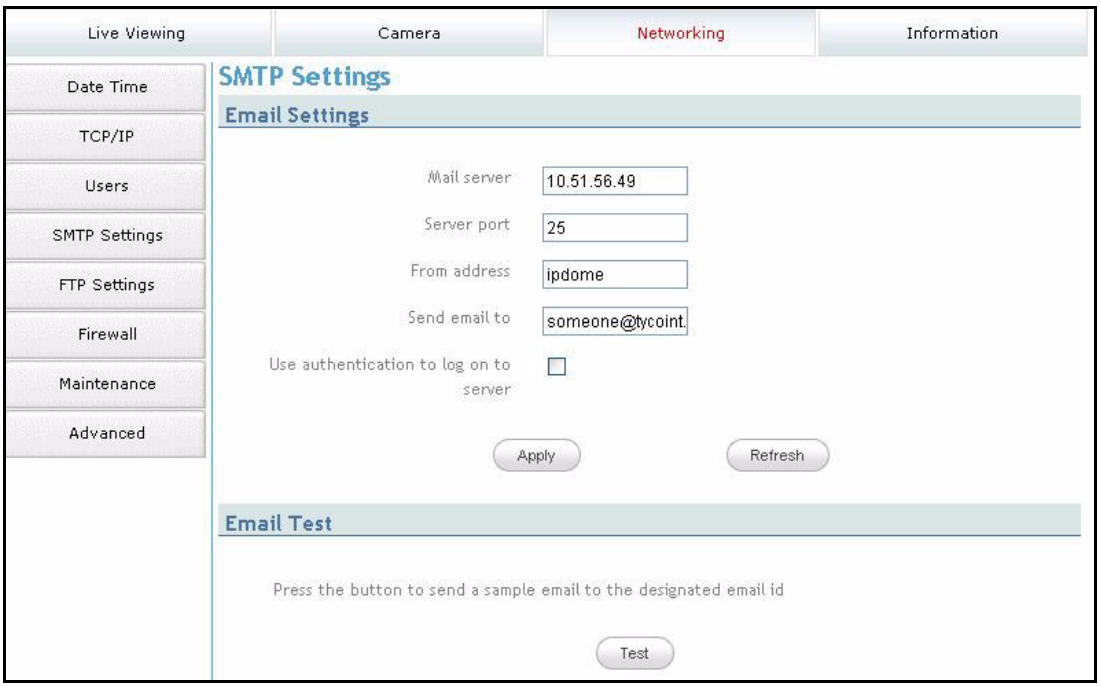


Figure 6-20 SMTP Settings screen

Email Settings

Set up the mail server which will be used when sending details of triggered alarms.

Note

SMTP must be configured to enable email alerts when using alarms.

Procedure 6-38 Configuring the Email Settings

1. Select **SMTP Settings** from the **Networking** menu.
2. In the Email Settings section enter the IP address of the mail server in the text box.
3. Enter the Server Port number in the text box.
4. Enter From Address in the text box.
5. Enter the Send Email To email address in the text box.
6. Select the check box to enable or disable the Use authentication to log on to server.

   If authentication is required a Username and Password text box will be displayed, enter the details to authenticate the server.
7. Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Email Test

Check that your SMTP settings are functioning correctly.

Procedure 6-39 Testing the SMTP configuration

1 Select **SMTP Settings** from the **Networking** menu.

When Procedure 6-38 Configuring the Email Settings has been followed the Email Test section will be visible.

2 In the Email Test section select the **Test** button.

A test email will be sent to the email address specified in Email Settings. It will contain the following message.

Receipt of this email confirms that your email settings have been correctly configured.

Camera IP:
Camera MAC:
Date:
Time:

3 If the test email is not received follow procedure Procedure 6-38 Configuring the Email Settings and ensure that the correct details have been entered.

FTP Settings

Configure the FTP settings for the FTP server in this section.

When FTP Settings is selected from the Networking menu. Figure 6-17 the FTP Settings screen will be displayed.

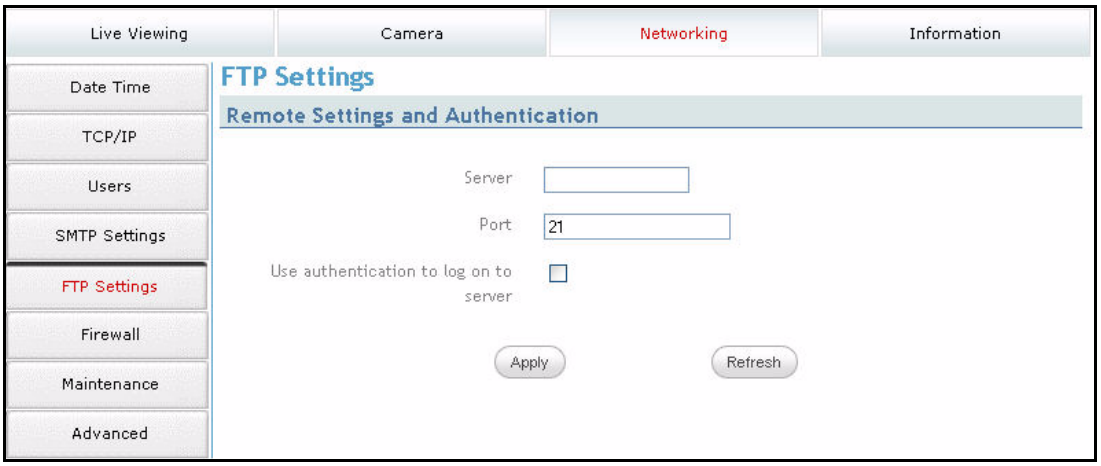


Figure 6-21 FTP Settings screen

FTP Settings

Set the Remote Settings and Authentication for the FTP Server.

Note

FTP must be configured to enable FTP alerts when using alarms.

Procedure 6-40 Configuring Remote Settings and Authentication

1. Select **FTP Settings** from the **Networking** menu.
2. Enter the FTP Server IP number in the text box.
3. Enter the Port in the text box. The default setting is 21.
4. For Use authentication to log on to server, select the check box to enable or disable this function. The default setting is disabled.

   If authentication is required a Username and Password text box will be displayed, enter the details to authenticate the server.
5. Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Procedure 6-41 Testing FTP Settings

1. Select **FTP Settings** from the **Networking** menu.
2. In the FTP Test section select the **Test** button.

   A test text file will be sent to the FTP Server address specified in the FTP Settings containing the following information.

   Camera Name:
   IP Address:
   Mac Address:

Date:
Time:

Receipt of this text file proves that the ftp settings are correct for this camera.

Firewall

Configure the Basic Filtering and Address Filtering for the Firewall.

When Firewall is selected from the Networking menu. Figure 6-22 the Firewall screen will be displayed.

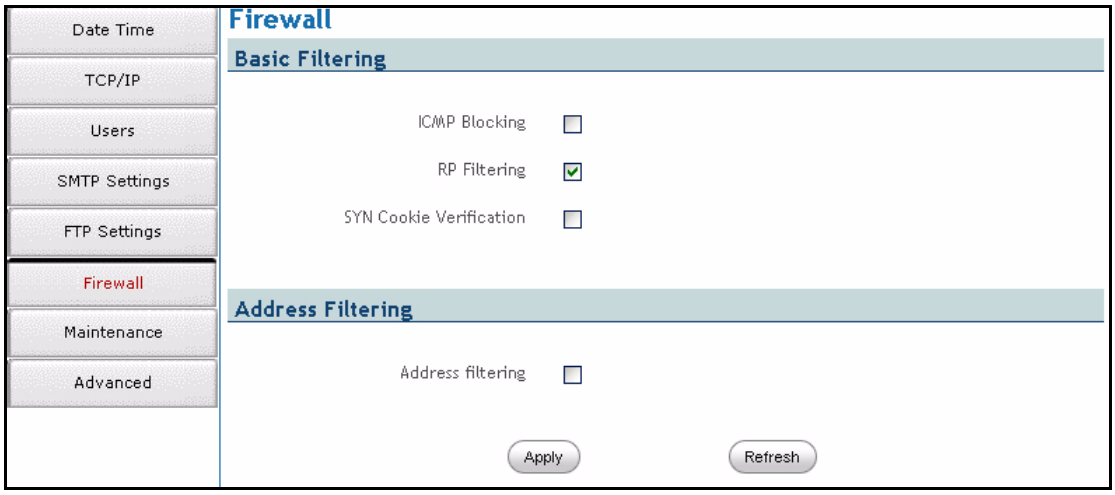


Figure 6-22 Firewall Settings screen

Firewall

Set the Basic Filtering and Address Filtering for the Firewall here.

Procedure 6-42 Configuring Basic Filtering

1. Select **Firewall** from the **Networking** menu.
2. Select the ICMP Blocking check box to enable or disable this function. The default setting is disabled.
3. Select the RP Filtering check box to enable or disable this function. The default setting is enabled.
4. Select the SYN Cookie verification check box to enable or disable this function. The default setting is disabled.
5. Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Procedure 6-43 Address Filtering

1. Select **Firewall** from the **Networking** menu.

2 Select the Address Filtering check box to enable or disable this function. The default setting is disabled. If Address Filtering is enabled. Figure 6-23 the Address List section will be displayed.

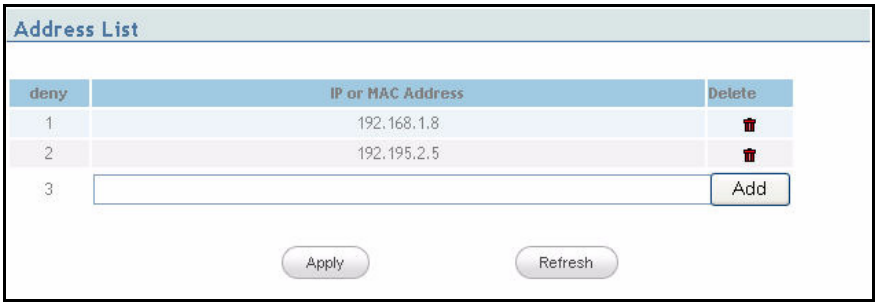


Figure 6-23 Address List section

3 Enter the IP or MAC Address in the text box.

4 Select the **Add** button to accept the entry.

5 To enter another IP or MAC Address repeat steps 3 and 4.

6 Once you have finished adding to the Address List, select the **Apply** button at the bottom of the page to save the entries. Select the **Refresh** button to.

Maintenance

Backup, restore, upgrade the server, perform a reboot or return to factory defaults from this section. You are also able to upload a HTTPS certificate.

When Maintenance is selected from the Networking menu. Figure 6-24 the Maintenance screen will be displayed.

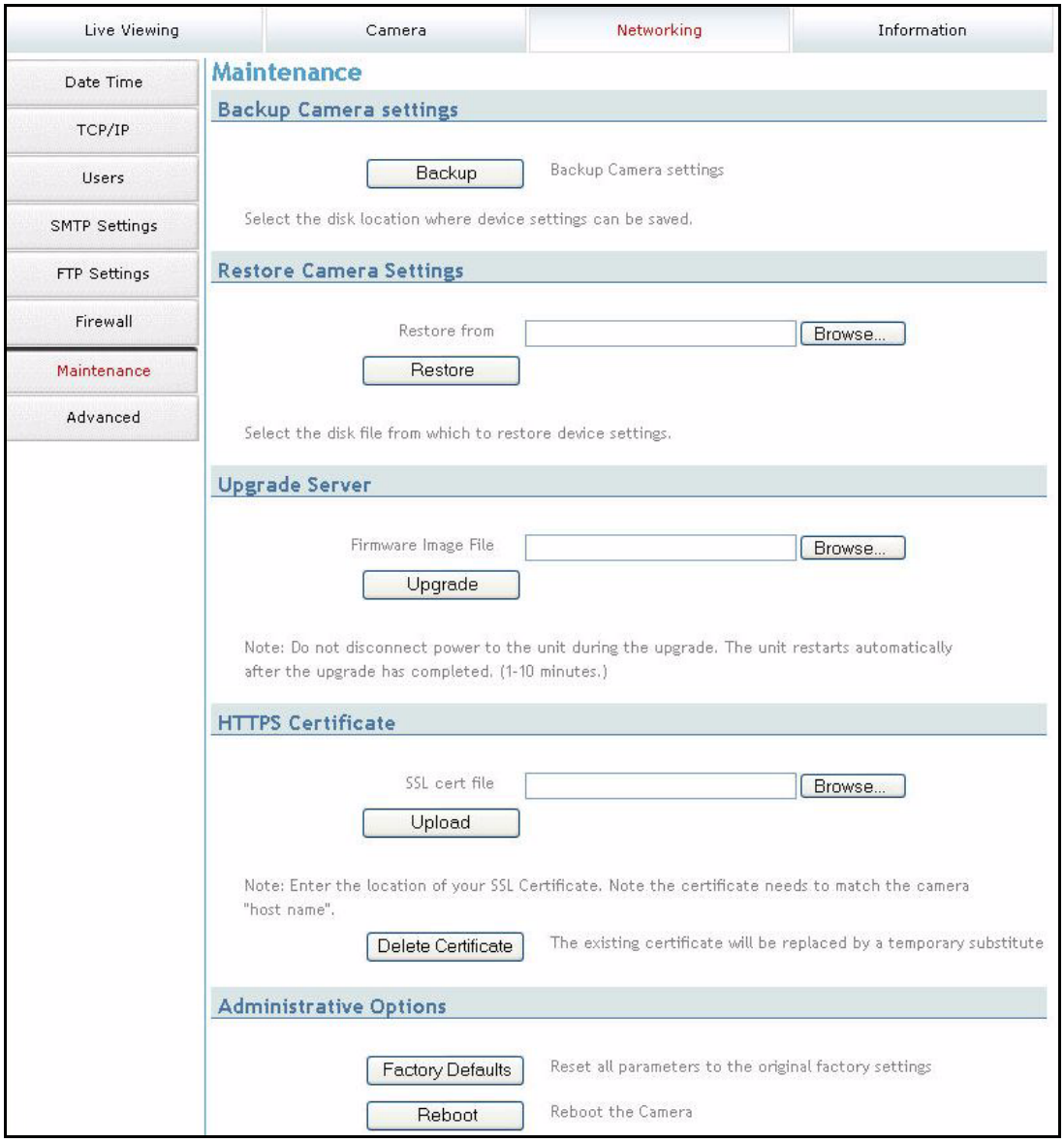


Figure 6-24 Maintenance screen

Procedure 6-44 Backup Camera Settings

The configuration settings of the IP Dome can be backed up to a data file. The data file can be saved to a specified location and used to restore the IP Dome configuration.

Note

A backed up data file created on a IP Dome is camera specific and cannot be used to restore the settings on another IP Dome.

1 Select **Maintenance** from the **Networking** menu.

2 In the Backup Camera section select the **Backup** button. The File Download dialog will be displayed and you will be prompted to save the backup file to disk.

3 Select the **Save** button, the Save As dialog will be displayed. If required enter a new File Name for the backup file in the text box.

Note

The filename must end with'.bin'.

4 Browse to the location where you would like to save the backup file. Select the **Save** button to save the backup file to the location specified.

Procedure 6-45 Restore Camera Settings

The IP Dome has the ability to restore its configuration from a previously saved configuration file.

Note

A backed up data file created on a IP Dome is camera specific and cannot be used to restore the settings on another IP Dome.

1 Select **Maintenance** from the **Networking** menu.

2 In the Restore Camera Settings section select the **Browse** button. The Choose file dialog will be displayed, navigate to the location where the backup file was saved.

3 Select the backup file you would like to load to the camera. Select the **Open** button.

Note

The filename must end with '.bin'.

4 Select the **Restore** button.

Procedure 6-46 Upgrade Server

The IP Dome can be upgraded using firmware provided by American Dynamics.

Caution

You should only use firmware that has been provided by American Dynamics. Using any other firmware may cause a malfunction and damage the IP Dome.

Note

All existing camera settings are maintained when the firmware is upgraded.

1 Select **Maintenance** from the **Networking** menu.

2 In the Upgrade Server selection select the **Browse** button. Browse to a saved Firmware Image File (provided by American Dynamics).

3 Select the **Upgrade** button.

Do not disconnect power to the unit during the upgrade. The IP Dome will restart automatically after the upgrade has completed (approximately 15 minutes).

HTTPS Certificate

The IP Dome has the ability to use a HTTPS Certificate.

Procedure 6-47 Add a HTTPS Certificate

1 Select **Maintenance** from the **Networking** menu.

2 In the HTTPS Certificate section select the **Browse** button. The Choose file dialog will be displayed, navigate to the location where the HTTPS Certificate has been saved.

Note

Note the certificate needs to match the camera 'host name'.

3 Select the file you would like to load to the camera then select the **Open** button.

4 Select the **Upload** button. The Camera will upload the HTTPS Certificate.

Procedure 6-48 Delete an HTTPS Certificate

1 Select **Maintenance** from the **Networking** menu.

2 In the HTTPS Certificate section select the **Delete Certificate** button. You will be prompted to confirm that you would like to remove the existing SSL Certificate.

3 Select the **OK** button to confirm the deletion. If the **Cancel** button is selected the delete will not occur.

Note

The existing certificate will be replaced by a temporary substitute. The current browser session will be lost and you will be required to log back in to the Web Configuration pages.

Procedure 6-49 Restore Factory Defaults

Reset all parameters to the original factory default settings.

Caution

Only one camera with the default IP Address should exist on the network at any one time. If more than one camera exists on the network with the default IP Address you may not be able to log in and configure these cameras.

1 Select **Maintenance** from the **Networking** menu.

2 In the Administrative Options section select the **Factory Defaults** button. You will be prompted to confirm that you would like to reset the camera.

3 Select the **OK** button to confirm the reset or select the **Cancel** button to stop the reset.

4 If the OK button has been selected, the camera will begin the restore procedure.

Wait for the camera to complete its initial boot up sequence which will take approximately 1 to 2 minutes. Upon completion of the initial boot up sequence the camera will be horizontal (0°).

5 Wait an additional 20 seconds (approximately) after the initial boot up sequence for the camera to recognize the reset state.

The camera head will point straight down (-90°) and carry out two 180° pan spins. The camera will then automatically reboot using the original factory default settings.

6 Follow Procedure 3-4 Logging in to the IP Dome to confirm that the camera has been restored to the factory default settings.

Procedure 6-50 Reboot the Camera

Will perform a reboot of the camera.

1 Select **Maintenance** from the **Networking** menu.

2 In the Administrative Options section select the **Reboot** button. You will be prompted to confirm that you would like to reboot the camera.

3 Select the **OK** button to confirm the reboot or select the **Cancel** button to stop the reboot.

4 If the OK button is selected, the camera will begin the reboot procedure.

Wait for the camera to complete its initial boot up sequence which will take approximately 1 to 2 minutes. Upon completion of the initial boot up sequence the camera will be horizontal (0°).

5 Follow Procedure 3-4 Logging in to the IP Dome to confirm that the camera has been returned to the factory default settings.

Advanced

Advanced settings allows you to set the camera name, bandwidth throttling, session timeout and Bonjour settings.

When **Advanced** is selected from the Networking menu. Figure 6-25 the Advanced screen will be displayed.

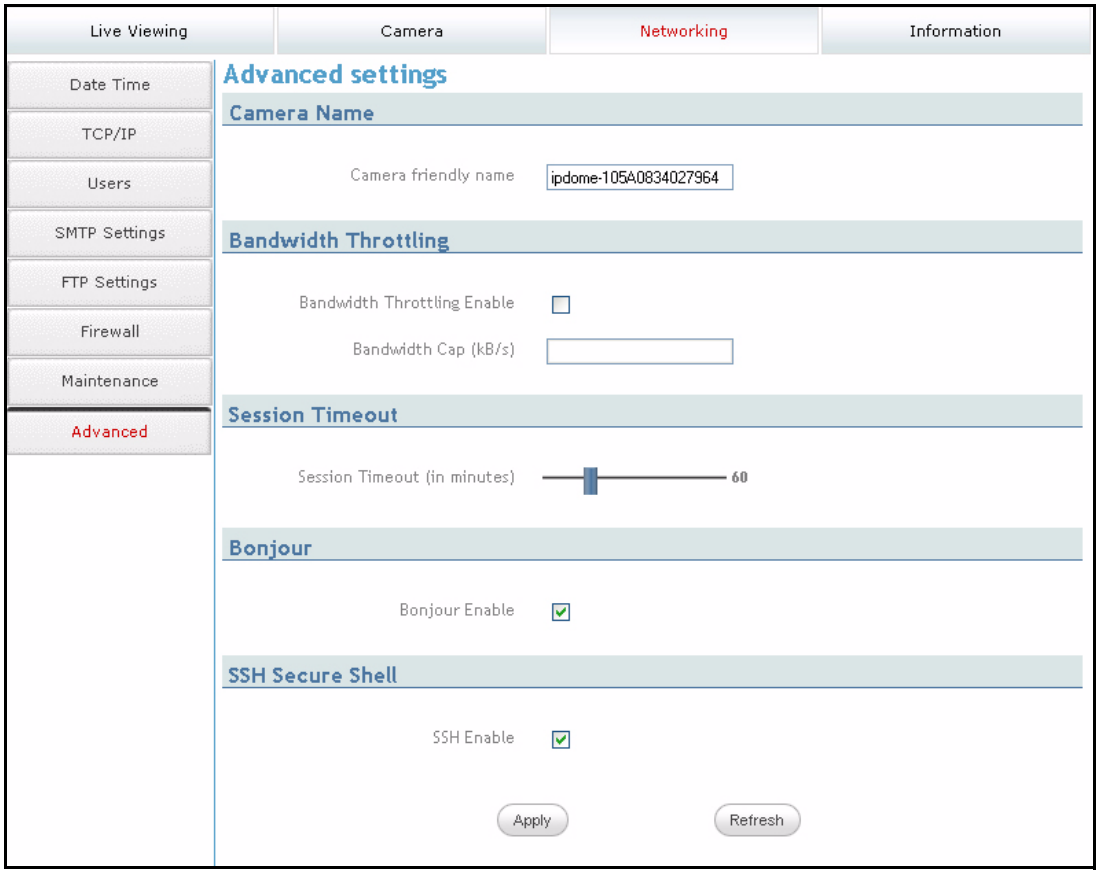


Figure 6-25 Advanced screen

Procedure 6-51 Setting the Camera Name

The camera friendly name will be shown on the VideoEdge® banner and on the on-screen display (OSD) if the option is selected.

1 Select **Advanced** from the **Networking** menu.

2 In the Camera Name section enter a user friendly name in the text box, this will make the camera easier to identify on the network.

The characters must be alphanumeric. It is also possible to use a blank space a minis '-' and forward slash '/'. A maximum of 24 characters are permitted.

3 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

4 The VideoEdge® banner will update to display the camera friendly name as seen in Figure 6-26.

Figure 6-26 Camera Friendly Name displayed in VideoEdge® banner

Bandwidth Throttling

Set the bandwidth throttling for the IP Dome. Refer to Bandwidth Throttling for more information.

Procedure 6-52 Set Bandwidth Throttling

1 Select **Advanced** from the **Networking** menu.

2 Use the check box to enable or disable the bandwidth throttling function. The default setting is disabled.

3 If bandwidth throttling has been enabled enter a bandwidth cap in the text box in kilobytes per second. It must be numeric and within the range of 100 to 12500.

4 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Procedure 6-53 Set Session Timeout

Specifies the number of minutes that a web session can remain idle before it is automatically terminated.

1 Select **Advanced** from the **Networking** menu.

2 In the Session Timeout section use the slider to select the number of minutes. The slider bar can be moved left or right using the mouse or for fine adjustments using the left and right arrow keys on the PC keyboard. The values range from 0 to 240. The default setting is 5 minutes.

3 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Bonjour

Bonjour is the preferred discovery method of the camera and the only method supported natively by the IP Dome.

Bonjour, enables automatic discovery of computers, devices, and services on IP networks. Bonjour uses industry standard IP protocols to allow devices to discover each other automatically, without the need to enter IP addresses or configure DNS servers. In order to provide a true zero-configuration experience, Bonjour requires that devices implement three essential things. These devices must be able to:

- Allocate IP addresses without a DHCP server
- Translate between names and addresses without a DNS server
- Locate or advertise services without using a directory server.

When started, the Bonjour discovery server will broadcast device information across the network at regular intervals. In addition on shutdown the camera will announce the camera's removal from the network to any interested Bonjour clients.

By default the camera will make the following information available to discovery clients:

- IP address
- Host name
- Domain name
- Friendly name
- AD Defined Custom Data:
  - Camera model
  - Camera serial number
  - MAC address
  - VideoEdge API version
  - VideoEdge URL
  - IDP port.

Zero Configuration Networking

Zero configuration networking (or Zeroconf) is a set of techniques for automatically creating IP networks. Apple's Bonjour protocol is one of the most common implementations of Zeroconf.

Zeroconf will provide:

- Address assignment
- Name resolution
- Service discovery.

Implementation

To facilitate development a third party implementation of the Bonjour protocol provided by Apple will be used to provide Bonjour discovery functionality in the camera.

Address Assignment

This will be handled by OS services.The camera will attempt to obtain an address from a DHCP server. If this fails the IP Dome will be assigned a Static IP Address of 192.168.0.80.

Service Discovery

In order to advertise services via the Bonjour protocol, the service types must first be registered via Apple in the Service Type Registry. American Dynamics has registered the following service types:

- ve-encoder
- ve-recorder
- ve-decoder
- ntlx-video
- ntlx-ent
- ntlx-arch

The camera will advertise the following services:

- _ve-encoder._tcp
- _http._tcp

- _ntlx-video._tcp

Procedure 6-54 Enable or Disable Bonjour

Allows IP Dome to be located on the network using Bonjour.

1 Select **Advanced** from the Networking menu.

2 In the Bonjour section use the check box to enable or disable the Bonjour function. The default setting is enabled.

Note

It is recommended to keep Bonjour enabled.

3 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Procedure 6-55 Enable or Disable SSH Secure Shell

Enables Secure Shell access into the IP Dome, if remote access is permitted by the camera network, to enable Level 3 Technical Support to diagnose any problems on the IP Dome.

1 Select **Advanced** from the Networking menu.

2 In the SSH Secure Shell section use the check box to enable or disable the SSH Enable function. The default setting is disabled.

Note

It is recommended to keep SSH Enable disabled. You should only enable this function when it is requested by Level 3 Technical Support.

3 Once you have chosen your settings, to save the changes select the **Apply** button or to cancel the changes select the **Refresh** button at the bottom of the page.

Information Menu

In this section information can be obtained on the camera, the configured settings, its physical state and any faults that have been found. It is also possible to change your password.

Model

When Information is selected. Figure 7-27 the Model Information screen will be displayed.

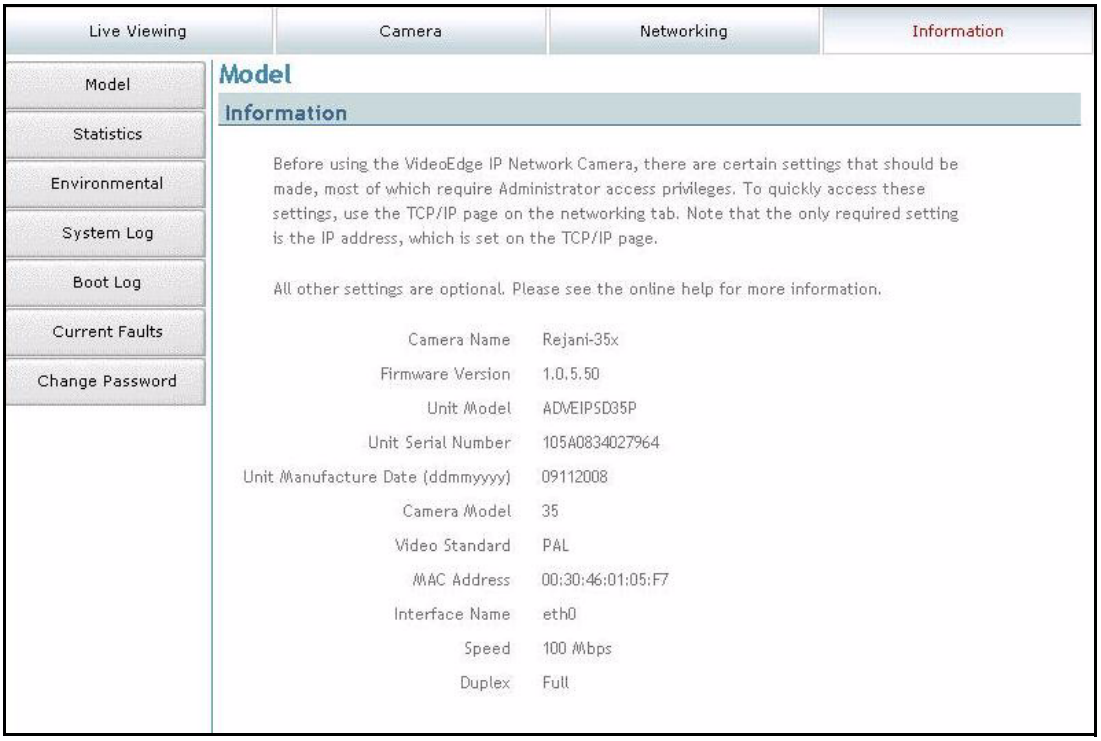

Live Viewing
Camera
Networking
Information
Model
Statistics
Environmental
System Log
Boot Log
Current Faults
Change Password
Model
Information
Before using the VideoEdge IP Network Camera, there are certain settings that should be made, most of which require Administrator access privileges. To quickly access these settings, use the TCP/IP page on the networking tab. Note that the only required setting is the IP address, which is set on the TCP/IP page.
All other settings are optional. Please see the online help for more information.
Camera Name Rejani-35x
Firmware Version 1.0.5.50
Unit Model ADVEIPSD35P
Unit Serial Number 105A0834027964
Unit Manufacture Date (ddmmyyyy) 09112008
Camera Model 35
Video Standard PAL
MAC Address 00:30:46:01:05:F7
Interface Name eth0
Speed 100 Mbps
Duplex Full

Figure 7-27 Model Information screen

Here you can find information on the following:

- Camera Name - as defined by Procedure 6-51 Setting the Camera Name
- Firmware Version - software/firmware version number
- Unit Model - factory programmed unit model
- Unit Serial Number - factory programmed serial number
- Unit Manufacture Date - factory programmed manufactured date
- Camera Model - denotes camera zoom model, either 22 or 35
- Video Standard - either PAL or NTSC
- MAC Address - factory default MAC Address
- Interface Name - name of ethernet interface
- Speed - speed of ethernet interface.
- Duplex - communication mode of ethernet interface

Statistics

When Statistics is selected from the Information menu. Figure 7-28 the Statistics screen will be displayed.

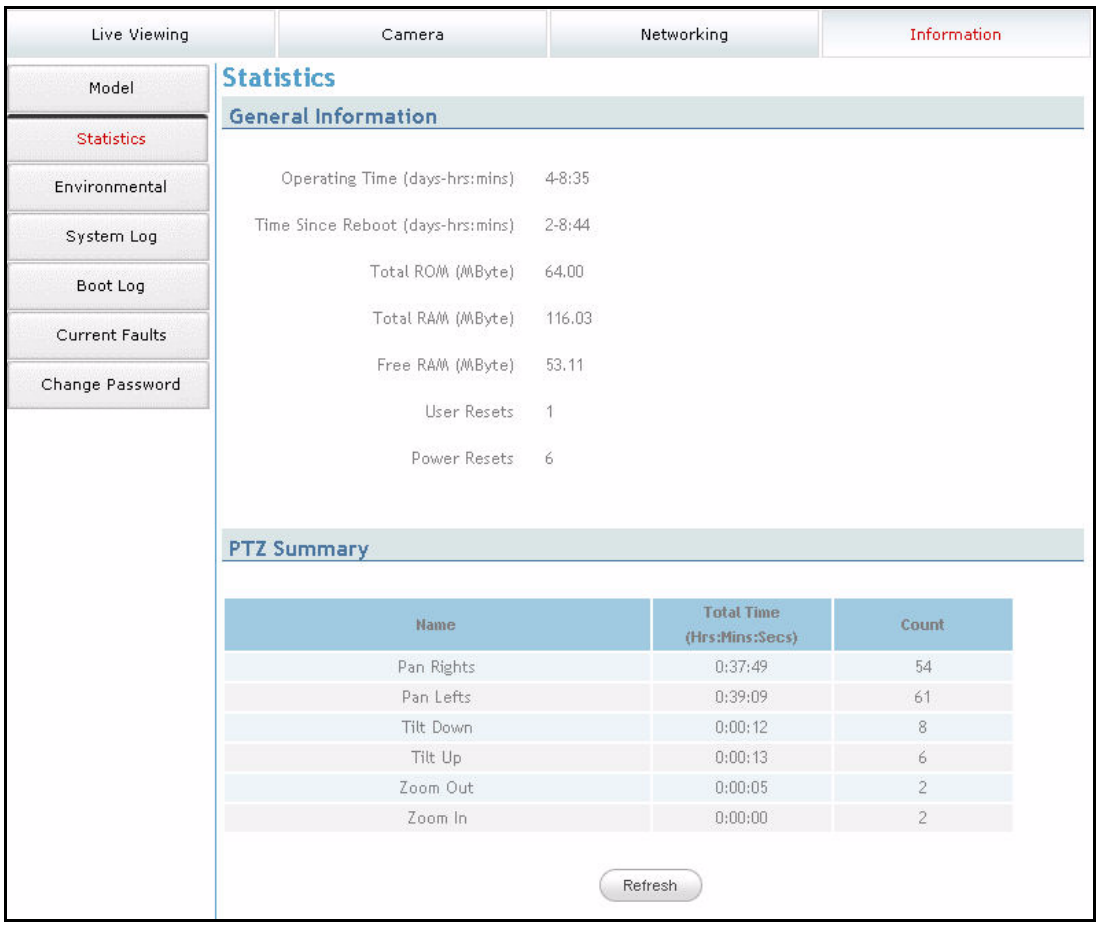


Figure 7-28 Statistics screen

General Information will display details of the following:

- Operating Time - total running time of the camera
- Time Since Reboot - total time since the last reboot of the camera
- Total ROM - total flash size in MB
- Total RAM - total RAM size in MB
- Free RAM - free RAM size in MB
- User Resets - total user requested resets
- Power Resets - total user requested power resets

PTZ Summary will display timing and count information for the following:

- Pan Rights
- Pan Lefts
- Tilt Down
- Tilt Up
- Zoom Out

- Zoom In

Select the **Refresh** button to refresh the page for the most up-to-date information.

Environmental

When Environmental is selected from the Information menu. Figure 7-29 the Environmental screen will be displayed

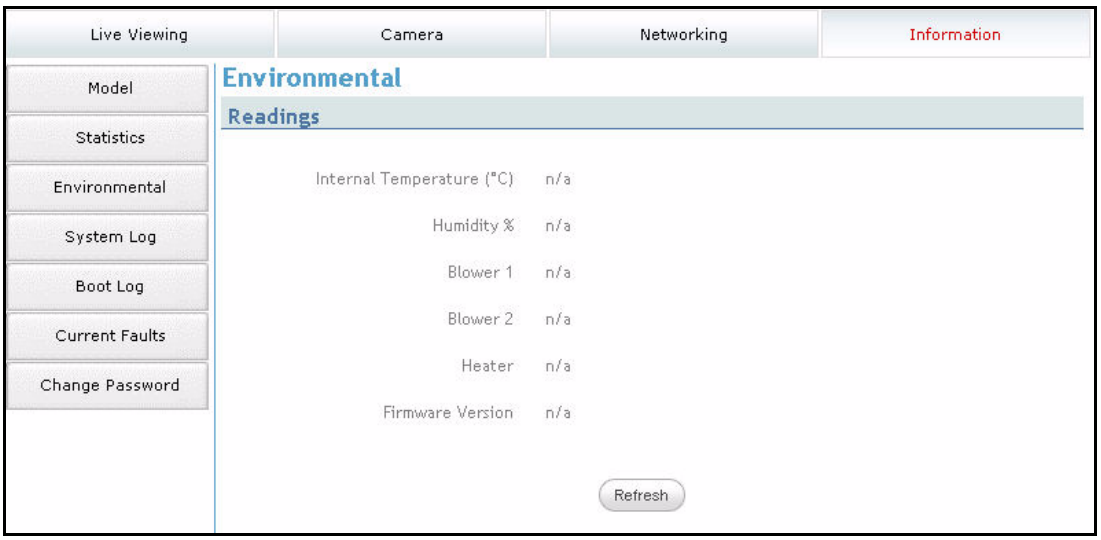


Figure 7-29 Environmental screen

Readings will provide information on the following:

- Internal Temperature
- Humidity
- Blower 1
- Blower 2
- Heater
- Firmware Version

Select the **Refresh** button to refresh the page for the most up-to-date information.

System Log

When System Log is selected from the Information menu. Figure 7-30 the System Log screen will be displayed

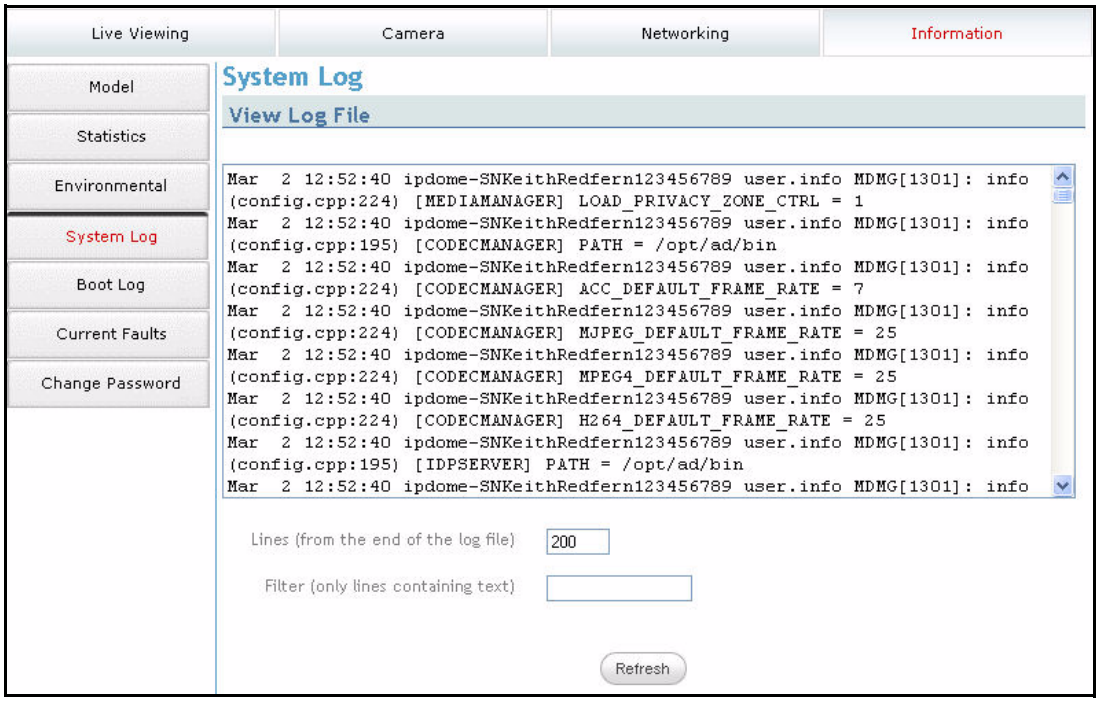

Live Viewing
Camera
Networking
Information
Model
Statistics
Environmental
System Log
Boot Log
Current Faults
Change Password
System Log
View Log File
Mar 2 12:52:40 ipdome-SNKeithRedfern123456789 user.info MDMG[1301]: info
(config.cpp:224) [MEDIAMANAGER] LOAD_PRIVACY_ZONE_CTRL = 1
Mar 2 12:52:40 ipdome-SNKeithRedfern123456789 user.info MDMG[1301]: info
(config.cpp:195) [CODECMANAGER] PATH = /opt/ad/bin
Mar 2 12:52:40 ipdome-SNKeithRedfern123456789 user.info MDMG[1301]: info
(config.cpp:224) [CODECMANAGER] ACC_DEFAULT_FRAME_RATE = 7
Mar 2 12:52:40 ipdome-SNKeithRedfern123456789 user.info MDMG[1301]: info
(config.cpp:224) [CODECMANAGER] MJPEG_DEFAULT_FRAME_RATE = 25
Mar 2 12:52:40 ipdome-SNKeithRedfern123456789 user.info MDMG[1301]: info
(config.cpp:224) [CODECMANAGER] MPEG4_DEFAULT_FRAME_RATE = 25
Mar 2 12:52:40 ipdome-SNKeithRedfern123456789 user.info MDMG[1301]: info
(config.cpp:224) [CODECMANAGER] H264_DEFAULT_FRAME_RATE = 25
Mar 2 12:52:40 ipdome-SNKeithRedfern123456789 user.info MDMG[1301]: info
(config.cpp:195) [IDPSERVER] PATH = /opt/ad/bin
Mar 2 12:52:40 ipdome-SNKeithRedfern123456789 user.info MDMG[1301]: info
Lines (from the end of the log file)
200
Filter (only lines containing text)
Refresh

Figure 7-30 System Log screen

The system log gives the most recent messages from the unix /var/log/messages file. Information will include the following:

- Informational messages about system behavior such as process startup/shutdown.
- Warnings about recoverable problems that processes encounter.
- Error messages where processes encounter problems they cannot fix; note that this does not mean that the process will not continue to work, only that it encountered an issue it could do nothing about.

Procedure 7-56 Update System Log

Select the **Refresh** button to refresh the log for the most up-to-date information.

Procedure 7-57 System Log Filter Search

1 Select System Log from the Information menu.

2 Enter the number of lines of the log file you would like to view in the Lines text box.

3 Enter the word or phrase that you would like to search for in the Filter text box.

4 Select the **Refresh** button.

If the word or phrase has been found the System Log will update and display the relevant information. If the System Log is empty no relevant information has been found.

Boot Log

When Boot Log is selected from the Information menu. Figure 7-31 the Boot Log screen will be displayed.

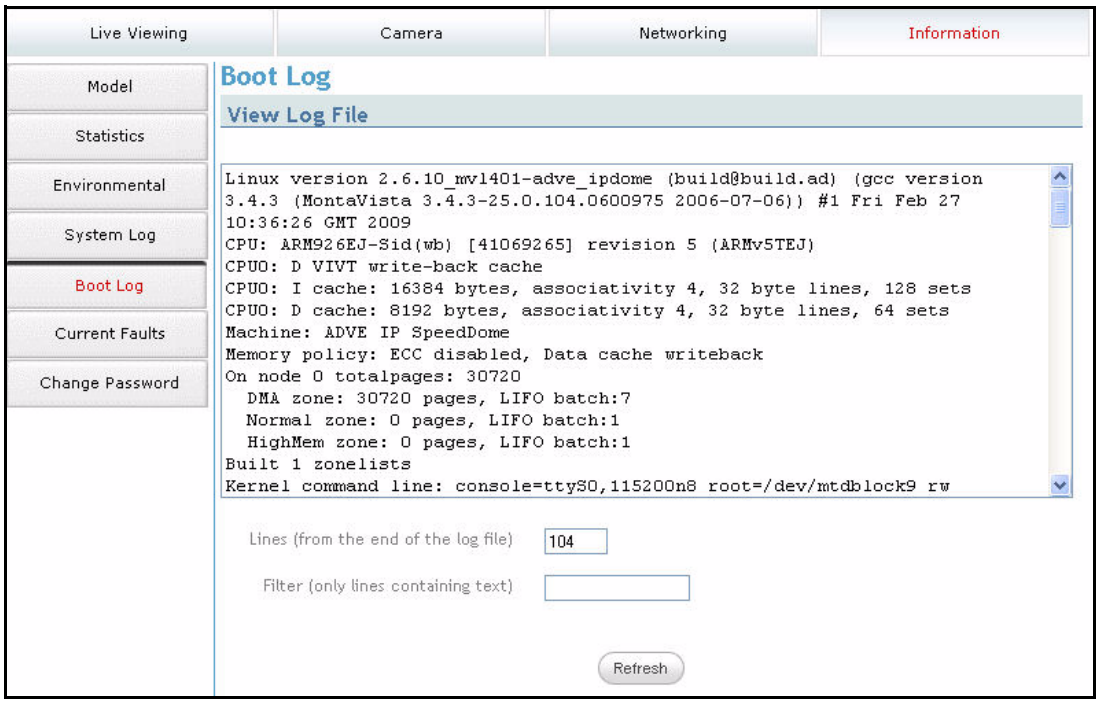

Live Viewing
Camera
Networking
Information
Model
Statistics
Environmental
System Log
Boot Log
Current Faults
Change Password
Boot Log
View Log File
Linux version 2.6.10_mv1401-adve_ipdome (build@build.ad) (gcc version 3.4.3 (MontaVista 3.4.3-25.0.104.0600975 2006-07-06)) #1 Fri Feb 27 10:36:26 GMT 2009
CPU: ARM926EJ-Sid(wb) [41069265] revision 5 (ARMv5TEJ)
CPU0: D VIVT write-back cache
CPU0: I cache: 16384 bytes, associativity 4, 32 byte lines, 128 sets
CPU0: D cache: 8192 bytes, associativity 4, 32 byte lines, 64 sets
Machine: ADVE IP SpeedDome
Memory policy: ECC disabled, Data cache writeback
On node 0 totalpages: 30720
DMA zone: 30720 pages, LIFO batch:7
Normal zone: 0 pages, LIFO batch:1
HighMem zone: 0 pages, LIFO batch:1
Built 1 zonelists
Kernel command line: console=ttyS0,115200n8 root=/dev/mtdblock9 rw
Lines (from the end of the log file)
104
Filter (only lines containing text)
Refresh

Figure 7-31 Boot Log screen

The Boot log is a log of the Linux operating system boot processes and will only be useful to AD engineers who require additional information on the device.

Procedure 7-58 Update Boot Log

Select the **Refresh** button to refresh the page for the most up-to-date information.

Procedure 7-59 Boot Log Filter Search

1. Select Boot Log from the Information menu.
2. Enter the number of lines of the log file you would like to view in the Lines text box.
3. Enter the word or phrase that you would like to search for in the Filter text box.
4. Select the **Refresh** button.

   If the word or phrase has been found the Boot Log will update and display the relevant information. If the Boot Log is empty no relevant information has been found.

Current Faults

When Current Faults is selected from the Information menu. Figure 7-32 the Current Faults screen will be displayed.

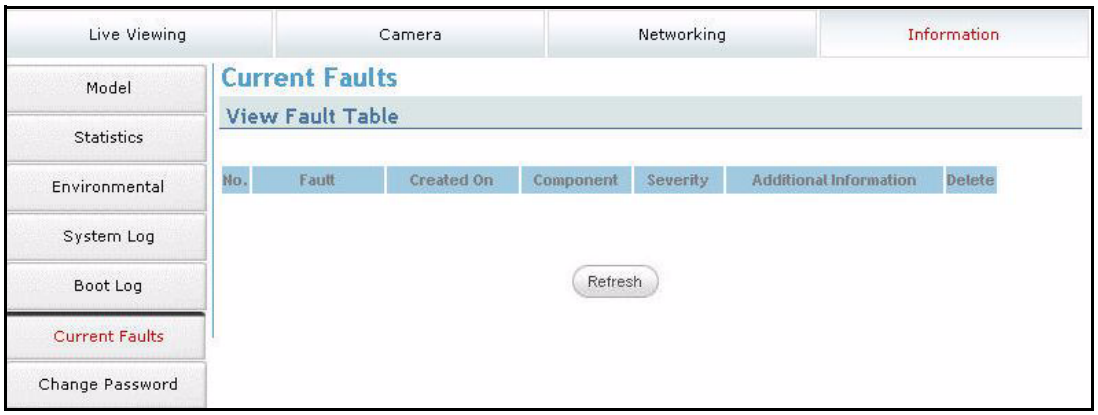


Figure 7-32 Current Faults screen with no faults displayed

The Fault Table will display information on any faults that your camera is currently experiencing.

- No - details the fault index.
- Fault - a description of the fault.
- Created On - the time and date when the fault occurred.
- Component - internal software component that raised the fault either DIOM (Digital Input Output Monitor) or ENVM (Environmental Monitor).
- Severity - indicates how serious the fault is. The following are supported, in increasing order of severity, Clear, Warning, Critical and Error.
- Additional Information - extra information that supplements the fault description.
- Delete -remove the fault from the fault table.

If any faults have been found the View Fault Table will update and display the faults as shown in Figure 7-33

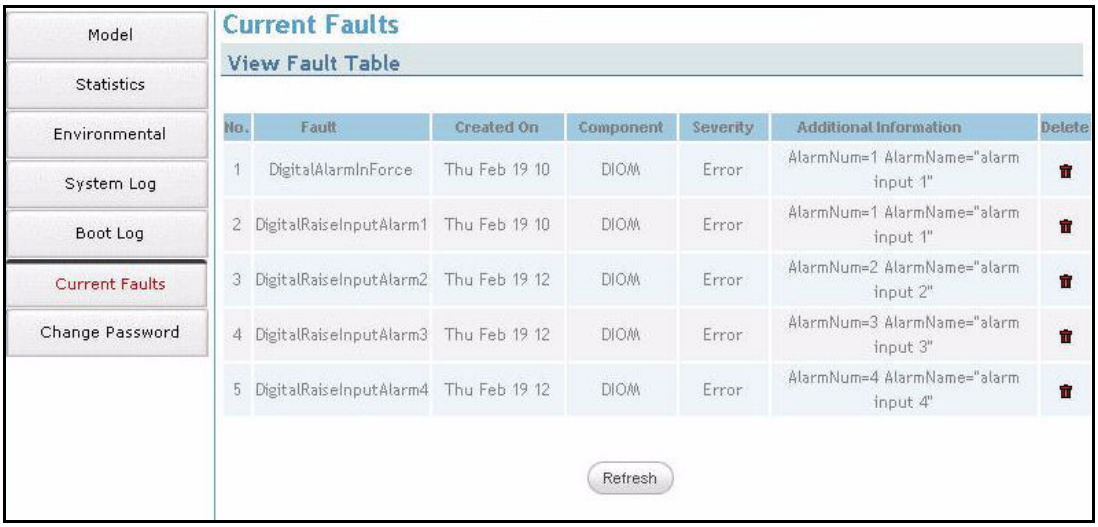

Model
Statistics
Environmental
System Log
Boot Log
Current Faults
Change Password
Current Faults
View Fault Table
No. Fault Created On Component Severity Additional Information Delete
1 DigitalAlarmInForce Thu Feb 19 10 DIOM Error AlarmNum=1 AlarmName="alarm input 1"
2 DigitalRaiseInputAlarm1 Thu Feb 19 10 DIOM Error AlarmNum=1 AlarmName="alarm input 1"
3 DigitalRaiseInputAlarm2 Thu Feb 19 12 DIOM Error AlarmNum=2 AlarmName="alarm input 2"
4 DigitalRaiseInputAlarm3 Thu Feb 19 12 DIOM Error AlarmNum=3 AlarmName="alarm input 3"
5 DigitalRaiseInputAlarm4 Thu Feb 19 12 DIOM Error AlarmNum=4 AlarmName="alarm input 4"
Refresh

Figure 7-33 Faults displayed in the View Fault Table

Fault Details

DIOM (Digital Input Output Monitor) Faults

The following faults can be raised by the DIOM component:

- DigitalAlarmInForce
- DigitalRaiseInputAlarm1
- DigitalRaiseInputAlarm2
- DigitalRaiseInputAlarm3
- DigitalRaiseInputAlarm4

ENVM (Environmental Monitor) Faults

If an environmental card is used the following faults can be raised by the ENVM component:

- **BlowerConditionFaulty (Error)**- the blower condition may be GOOD or FAIL. Since the environmental card hardware contains two blowers, the reported condition is the worst for both blowers. Therefore, if one blower fails, but the other works correctly, the condition will be reported as “Fail”.
- **TemperatureTooHigh (Warning)**- this fault is raised when the internal temperature of the enclosure is equal to or exceeds the value MAX_TEMPERATURE held in ENVM.conf. Once an alarm is generated and the temperature drops to a level 1 degree below the MAX_TEMPERATURE value the fault is then automatically cleared. This is to avoid transient changes in temperature around the threshold.
- **TemperatureTooLow (Warning)** - a fault is raised when the internal temperature of the enclosure is equal to or is below the value MIN_TEMPERATURE held in ENVM.conf. Once an alarm is generated and the temperature drops to a level 1 degree above the MIN_TEMPERATURE value the fault is then automatically cleared. This is to avoid transient changes in temperature around the threshold.
- **HumidityTooHigh (Warning)** - a fault is raised when the humidity of the enclosure is equal to or above the value MAX_HUMIDITY held in ENVM.conf. Once an alarm is generated and the humidity drops to a level 1% below the MAX_HUMIDITY value the fault is then automatically cleared. This is to avoid transient changes in temperature around the threshold.
- **TemperatureOrHumiditySafeMode (Error)**- the “Safe ON” and “Safe OFF” operational modes indicate that the environmental card software detected a failure in the temperature or humidity sensor and turned the blowers and heaters to the safe default state. The blower safe default state is “Safe ON”. The heater safe default state is “Safe OFF”.

ENVM Card Upgrade Progress

When an environmental card is being updated with new software the following faults can be raised by the EnvLoadSofwareFile component:

- **LoadSoftwareFile (Critical)** - this is generated if the software load fails. It is given a critical severity as the environmental card may be rendered inoperable. If this error occurs it may be necessary to reprogram the environmental card with the boot loader.
- **LoadSoftwareFile (Error)** - this is generated if the software file is not standardised or has a version number that is older than the current version installed. To prevent this error ensure that all software is provided by American Dynamics.

Change Password

When Change Password is selected from the Information menu. Figure 7-34 the Change Password screen will be displayed.

Figure 7-34 Change Password screen

Procedure 7-60 Changing an existing password

1. Select **Change Password** from the **Information** menu.
2. Select your username from the Name drop-down menu.
3. Enter your Current Password in the text box.
4. Enter your New Password in the text box. The password is case sensitive and can contain alphanumeric characters with a length of between 4 and 20 characters.
5. Enter your new password in the Confirm New Password text box.
6. Select **Change** to apply the password change.

Camera Recovery

The IP Dome has a built in recovery process which will allow you to upload the latest firmware if the camera is unable to restart.

If the camera encounters three unsuccessful restarts in a row it will automatically enter the Camera Recovery section. When this occurs Figure 8-35 the Camera Recovery screen will be displayed.

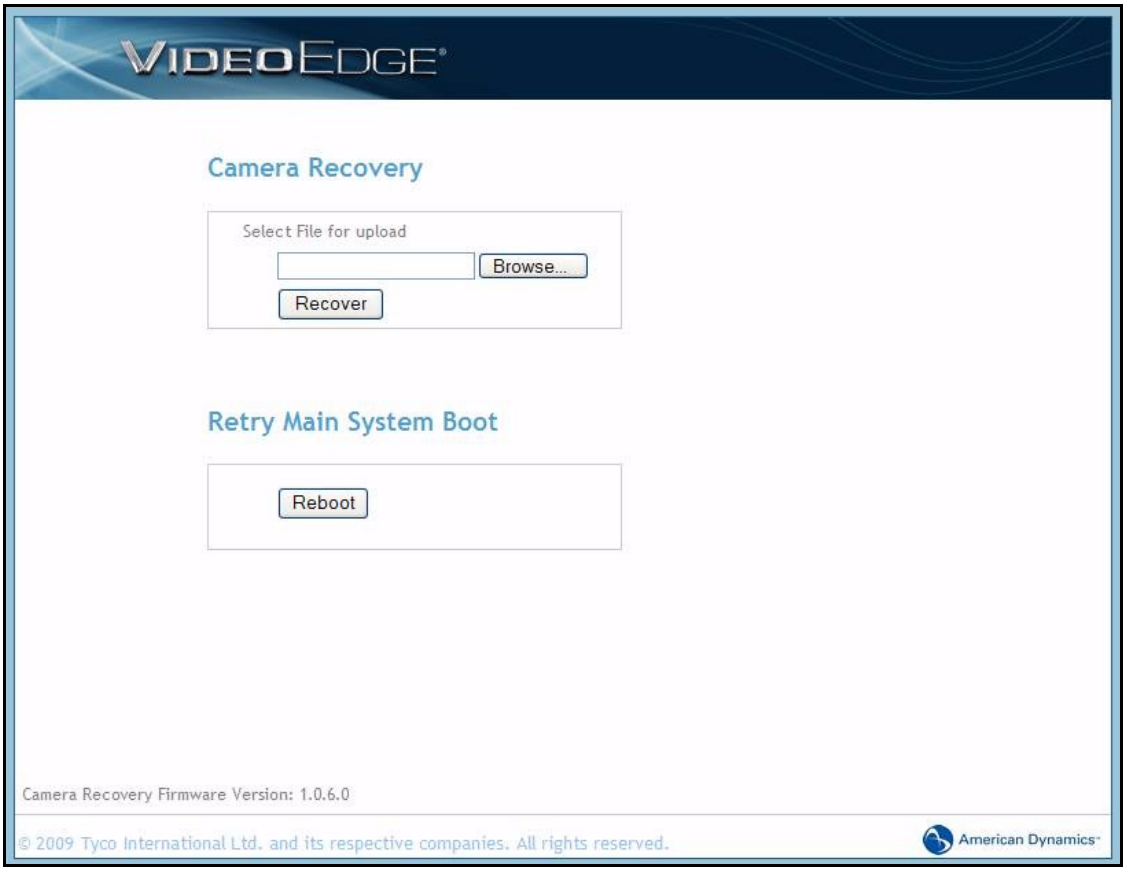


Figure 8-35 Camera Recovery screen

The IP Dome can be recovered using firmware provided by American Dynamics or rebooted using the Main System boot files.

Procedure 8-61 Using Camera Recovery

This procedure will restore all settings on the IP Dome including the IP address and all user accounts and passwords to the factory default settings.

Note

Only one camera with the default IP Address should exist on the network at any one time. If more than one camera exists on the network with the default IP Address you may not be able to log in and configure these cameras.

1. On the Camera Recovery screen, select the **Browse** button. Browse to a saved Firmware Image File (provided by American Dynamics).
2. Select the **Recover** button. The Camera Recovery confirmation screen will appear.
3. The restoration process may take up to 30 minutes to complete. Do not disconnect power to the unit during the process.

4 When the process is complete.

The camera will begin its initial boot up sequence which will take approximately 1 to 2 minutes.

5 Follow Procedure 3-4 Logging in to the IP Dome to confirm that the camera has been returned to the factory default settings.

Procedure 8-62 Retry Main System Boot

This procedure will maintain all current camera settings including the IP address and all user accounts and passwords.

1 On the Camera Recovery screen in the Retry Main System Boot section select the **Reboot** button.

2 You will be prompted to confirm the reboot.Select the **OK** button to confirm or the **Cancel** button to stop the reboot.

3 If OK was selected the Camera Rebooting Progress bar will appear and the IP Dome will reboot.

4 When the process is complete.

The camera will begin its initial boot up sequence which will take approximately 1 to 2 minutes.

5 Follow Procedure 3-4 Logging in to the IP Dome.

Note

If Figure 8-35 Camera Recovery screen appears the reboot has been unsuccessful and this procedure may have to be repeated. Alternatively follow Procedure 8-61 Using Camera Recovery to restore the firmware on the IP Dome.

Physical Factory Reset

The following procedure restores all settings on the IP Dome including the IP address and all user accounts and passwords to the factory default settings.

Warning

24VAC are accessible on the Environmental Card.

Procedure 8-63 Physical Factory Reset **MUST** be performed by an Installer.

Procedure 8-63 Physical Factory Reset

1. Remove power from the camera.
2. Remove the bubble.

   Refer to the printed Quick Start Guide and follow the directions in reverse to remove the bubble.
3. Remove the camera from the mount.

   Refer to the printed Quick Start Guide and follow the directions in reverse to remove the camera.

   Note

   When removing the camera proceed with caution as the cables are still attached to the camera base.
4. Remove and dispose the desiccant packet.
5. If using the camera with an environmental card it will be necessary to disconnect the environmental connector leads from the base of the camera. Refer to Figure 8-36 for details.

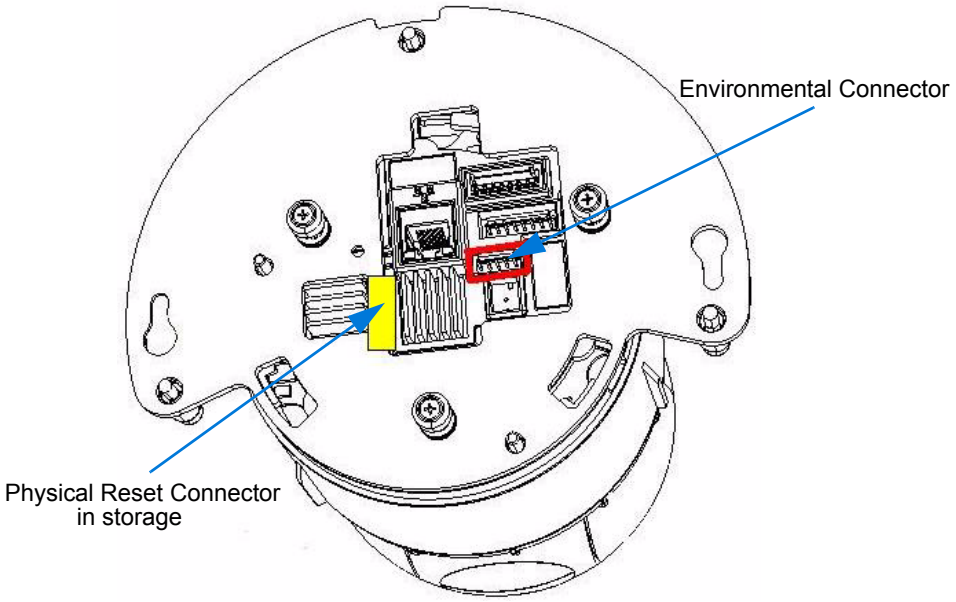


Figure 8-36 The Camera Base

6 Locate the physical reset connector stored on the base of the camera. Refer to Figure 8-36.

   If there is no physical reset connector, replace the camera into the mount and contact Technical Support.

7 Attach the physical reset connector to the environmental connector on the base of the camera. Refer to Figure 8-36.

8 Replace the camera into the mount. Tighten the screws.

9 Reapply power to the camera.

   The camera will begin its initial boot up sequence which will take approximately 1 to 2 minutes. Upon completion of the initial boot up sequence the camera will be horizontal (0°).

10 Wait an additional 20 seconds (approximately) after the initial boot up sequence for the camera to recognize the reset state.

   Upon recognition, the camera head will point straight down (-90°) and carry out two 180° pan spins. The camera will then automatically reboot using the original factory default settings.

11 The camera will begin its initial boot up sequence which will take approximately 1 to 2 minutes. Upon completion of the initial boot up sequence the camera will be horizontal (0°).

12 Remove power from the camera.

13 Remove the camera from the mount.

14 Remove the physical reset connector from the environmental connector on the base of the camera.

15 Return the physical reset connector to its storage place on the base of the camera. Refer to Figure 8-36.

16 If using the camera with an environmental card it will be necessary to reconnect the connector leads to the base of the camera. Refer to Figure 8-36.

17 Attach a new desiccant packet to the camera.

18 Replace the camera into the mount. Tighten the screws.

19 Reapply power to the camera.

   The camera will begin its initial boot up sequence which will take approximately 1 to 2 minutes. Upon completion of the initial boot up sequence the camera will be horizontal (0°).

20 Follow Procedure 3-4 Logging in to the IP Dome to confirm that the camera has been returned to the factory default settings.

Technical specification

This section details the environmental and operating specifications of the IP Dome.

Technical Specifications

Category	Specification	Details
Power	**Supply voltage**	**12Vdc, PoE (Indoor) 12.95W max**
		PoE (Indoor) 802.3af compliant, 12.95W max
Operating Temperature	**Environment**	**Indoor IP Dome Operating Temperature: -14°F to 122°F (-10°C to 50°C)** **Outdoor IP Dome Housing Operating Temperature: -40°F to 122°F (-40°C to 50°C)**
	Humidity	**95% non condensing at 122°F (50°C)**
	Storage Temperature	**-20°F to 149°F (-20°C to 65°C)**
Safety	**USA and Canada**	**Indoor* UL60950-1/CSA C22.2.60950-1** **Outdoor** UL1950/CSA C22.2 No. 950 and UL50 (Type 4)**
	European Union	**Indoor* EN60950-1** **Outdoor** EN60950-1/EN60950-22 and EN60529 IP 66**
EMC	**USA**	**FCC Part 15 class A**
	Canada	**ICES-003/NMB-003 class A**
	Europe	**EN55022 class A** **EN50130-4**
	Australia/New Zealand	**AS/NZS CISPR22 class A**
RoHS		**Complies with European directive 2002/95/EC**

Table 9-3 — Technical Specifications

* Indoor: ADVEIPSD35N, ADVEIPSD35P,ADVEIPSD22N, ADVEIPSD22P. Regulatory Type: VP SDUIP.

** Outdoor signifies separate certification for outdoor housing enclosure. Regulatory Type: SV SDUO.

Certified Limited Power Required.

This installation should be made by a qualified service person and should conform to all local codes. For outdoor installations use liquid-tight conduit or liquid-tight pipe.

For outdoor installations, use Class 3 wiring techniques, liquid-tight conduit, or liquid-tight pipe.

Camera Specifications

	35x	22x
Horizontal Resolution	540 Lines	470 Lines
Imager	Interline transfer 1/4-inch CCD array	Interline transfer 1/4-inch CCD array
Scanning System	2:1 interface	2:1 interface
Wide Dynamic Range, EIS, Day/Night	Yes	No
tS/N Ratio	>50 dB (typical)	>50 dB (typical)
Minimum Illumination (20IRE, AGC)	0.24 lux (Color); 0.028 lux	0.3 lux (Color)
	(Color with 1/4 sec open shutter)	0.02 lux (Color with 1/4 sec open shutter)
	0.021 lux (B/W IR Mode)	
	0.00041 lux	
	(B/W IR Mode with 1/2 sec open shutter	
White Balance	Through the Lens (TTL) Automatic	Through the Lens (TTL) Automatic
	Tracing White Balance (ATW)	Tracing White Balance (ATW)
NTSC (PAL)		
Shutter Speed (Auto/Manual)	1/2 - 1/30,000 (1/1.5 - 1/30,000)	1/2 - 1/30,000 (1/1.5 - 1/30,000)
Lens		
Aperture (Aspherical Design)	f1.4	f1.6
Focal Length	3.4 to 119 mm	4 to 88 mm
Wide Angle (field of view)	3.4 mm/55.8 (H) x 41.8 (V)	4 mm/47.0 (H) x 35.2 (V)
Telephoto (field of view)	119 mm/1.7 (H) x 1.3 (V)	88 mm/4.0 (H) x 3.0 (V)
Total/Optical/Digital Zoom	420x/35x/12x	264x/22x/12x

Table 9-4 — Camera Specifications

Compression

Category	Details
Video Compression	MJPEG up to 30/25 ips in all resolutions
	MJPEG4 up to 30/25 ips in all resolutions
	ACC up to 30/25 ips in all resolutions
	H.264
Resolutions	704x576 - 320x240
Audio Compression	PCM
	G711 A
	G711 U

CODEC Combinations

The following table shows single or dual video streams scenarios that are supported at the frame rates specified. In this table, the video streams could be a Live, Recording, Web GUI or Alarm Buffering Stream (always MJPEG). ‘ACC GUI’ is an ACC stream used in the Web GUI, whereas ‘ACC’ is an ACC stream used as a Live or Recording stream via the Network Video Recording device.

Primary (Live Stream) D1-30/25 fps	Secondary Stream (Recorded Stream) 2CIF - 30-25 FPS
MJPEG or MPEG4 at the highest resolution supported, full frame rate and highest quality recommended	-
ACC at the highest resolution, quality and sensitivity supported, full frame rate	-
MJPEG at 4CIF(704) resolution, full frame rate and highest quality recommended	ACC GUI with default parameters (2CIF (640), Normal, Normal at 7 FPS)
MPEG4 at 4CIF(704) resolution, full frame rate and “normal” quality	ACC GUI at 2CIF (640), Normal, Normal at 4 FPS
ACC at 4CIF(704) resolution, full frame rate and normal quality, normal sensitivity	ACC GUI at 2CIF (640), Normal, Normal at 4 FPS
MJPEG at the highest resolution supported, full frame rate and highest quality recommended	MJPEG with the exact same resolution, quality and frame rate as 1st stream
MJPEG at the highest resolution supported, full frame rate and highest quality recommended	MJPEG with resolution <= 2CIF and quality <= normal, full frame rate
MPEG4 at 2CIF (640) resolution, full frame rate and highest quality recommended	MJPEG with resolution <= 2CIF(640), quality <= normal and frame rate <=13 FPS
ACC at 4CIF (704) resolution, full frame rate and normal quality, normal sensitivity	MJPEG at 2CIF (640), normal quality and frame rate <= 10 FPS

Table 9-5 — Video Codec Combinations

Alarm Buffering

Alarm Buffering will be enabled if FTP or Email is enabled for any of the alarms set up in the Alarms section.

The table below shows which stream will be used for Alarm Buffering in different scenarios. The streams might be Live, Recording or a WebGUI stream. ‘ACC GUI’ is an ACC stream used in the

WebGUI, whereas ‘ACC’ is an ACC stream used as a Live or Recording stream via the Network Video Recording device.

1st Stream	2nd Stream	3rd Stream	Alarm Buffering
-	-	-	YES: Using the Minimum Requested Alarm Buffering Video Settings
MJPEG	-	-	YES: Using the best MJPEG stream settings from existing stream (codec would be shared) and the Minimum Requested Alarm Buffering Video Settings
MPEG4, ACC or ACC GUI	-	-	YES: Using the Minimum Requested Alarm Buffering Video Settings
MJPEG	ACC GUI	-	YES: Using the best MJPEG stream settings from existing stream (codec would be shared) and Minimum Requested Alarm Buffering Video Settings
MPEG4, ACC or ACC GUI	ACC GUI	-	YES: Using the Minimum Requested Alarm Buffering Video Settings
ACC GUI	MJPEG	-	YES: Using the best MJPEG stream settings from existing stream (codec would be shared) and Minimum Requested Alarm Buffering Video Settings (separate codec would be run)
ACC GUI	MPEG4 or ACC	-	YES: Using the Minimum Requested Alarm Buffering Video Settings (separate codec is required)
MJPEG	MJPEG	-	YES: Sharing the codec with the best MJPEG stream from the two existing ones
MPEG4, ACC	MJPEG	-	YES: Sharing the codec with the existing MJPEG Stream
MJPEG	MPEG4, ACC	-	YES: Sharing the codec with the existing MJPEG Stream
MPEG4 or ACC	MPEG4 or ACC	-	YES: Using the Minimum Requested Alarm Buffering Video Settings
MJPEG	MJPEG	ACC GUI	YES: Sharing the codec with the best MJPEG stream from the two existing ones
MPEG4, ACC or ACC GUI	MJPEG	ACC GUI	YES: Sharing the codec with the existing MJPEG Stream
MJPEG	MPEG4, ACC or ACC GUI	ACC GUI	YES: Sharing the codec with the existing MJPEG Stream
MPEG4, ACC or ACC GUI	ACC GUI MPEG4, ACC or ACC GUI	ACC GUI	YES: Using the Minimum Requested Alarm Buffering Video Settings (separate codec is required)

Table 9-6 — Alarm Buffering

Certification and Regulations

Category	Specification	Details
Safety	UL	Indoor*: UL60950-1 /
		CSA C22.2 No.60950-22
		Outdoor**: UL60950-1 and UL 60950-22 /
		CSA C22.2 No. 60950-22
	TUV	Indoor*: EN60950-1
		Outdoor**: EN60950-1 and EN60950-22
	CB	Indoor*: IEC60950-1
		Outdoor**: IEC60950-1 and IEC60950-22
EMC	USA	FCC Part 15 class A
	Canada	ICES-003/NMB-003 class
	Europe	EN55022 class A
		EN50130-4
	Australia / New Zealand	AS/NZS CISPR22
RoHS	Complies with European directive 2002/95/EC	

Table 9-7 — Certification and Regulations

*Indoor covers the VEIPSD only

**Outdoor signifies separate certification for Outdoor housing enclosure

Appendix 10: User Account Privileges

Camera Menu	Admin	Recorder	User
Live Viewing Menu	X	X	X
Video	X	X	X
Presets	X	X	X
Pattern	X	X	X
Scans/Sequences	X	X	X
Privacy Zones	X	X	X
Stored Audio	X	X	X
Camera Adjust	X	X	-
Camera Menu	X	X	-
PTZ Configuration	X	X	-
Overlay Settings	X	-	-
Areas	X	-	-
Alarms	X	-	-
Add Sequence	X	X	-
Scheduled Tasks	X	-	-
Video	X	-	-
Audio	X	-	-
Networking Menu	X	-	-
Date Time	X	-	-
TCP/IP	X	-	-
Users	X	-	-
SMTP Settings	X	-	-
FTP Settings	X	-	-
Firewall	X	-	-
Maintenance	X	-	-
Advanced	X	-	-
Information Menu	X	X	X
Model	X	X	X
Statistics	X	X	-
Environmental	X	X	-
System Log	X	-	-
Boot Log	X	-	-
Current Faults	X	X	-
Change Password	X	X	X

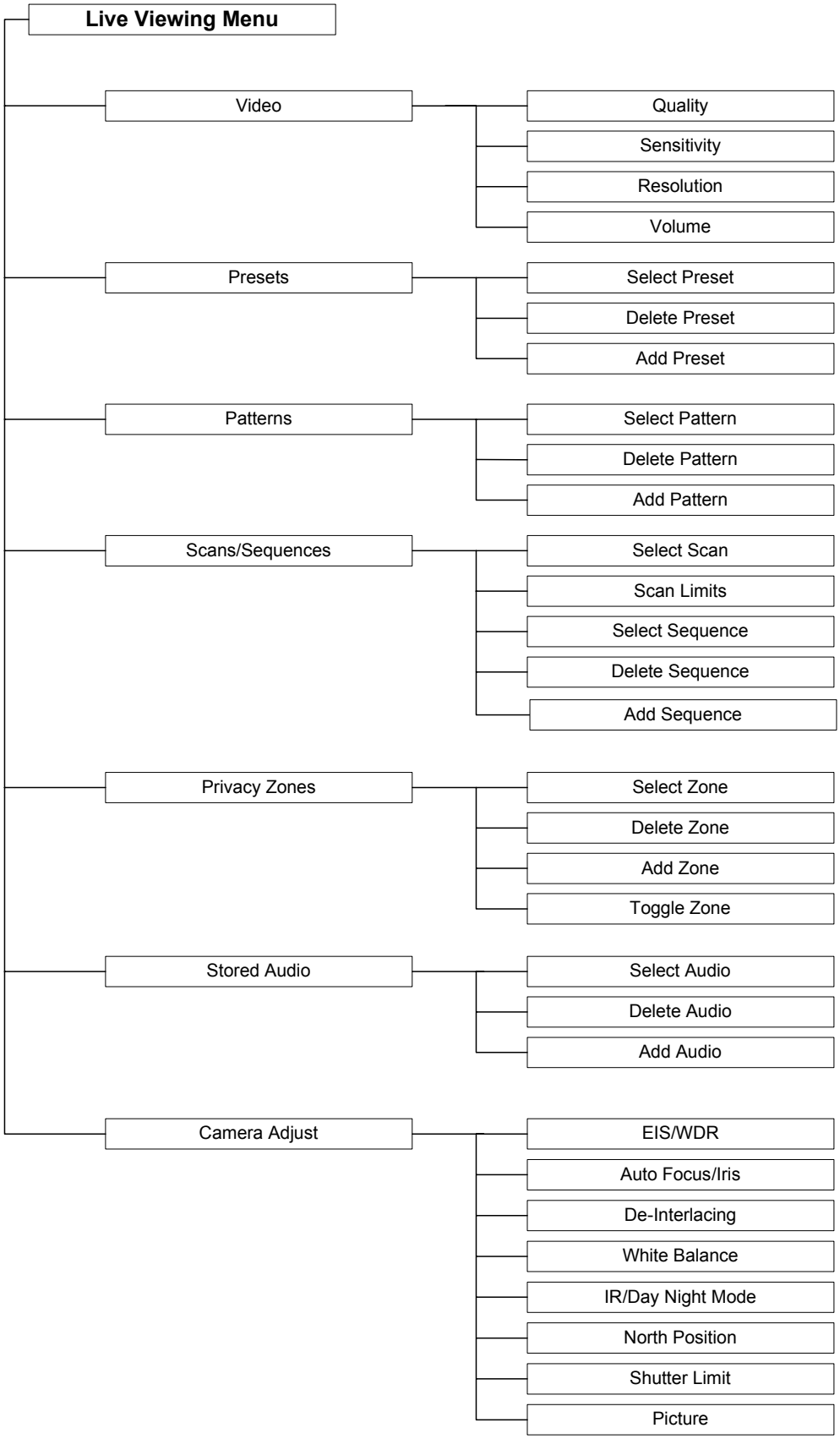
Table 10-8 — User Account Privileges

Appendix 11: Site Maps

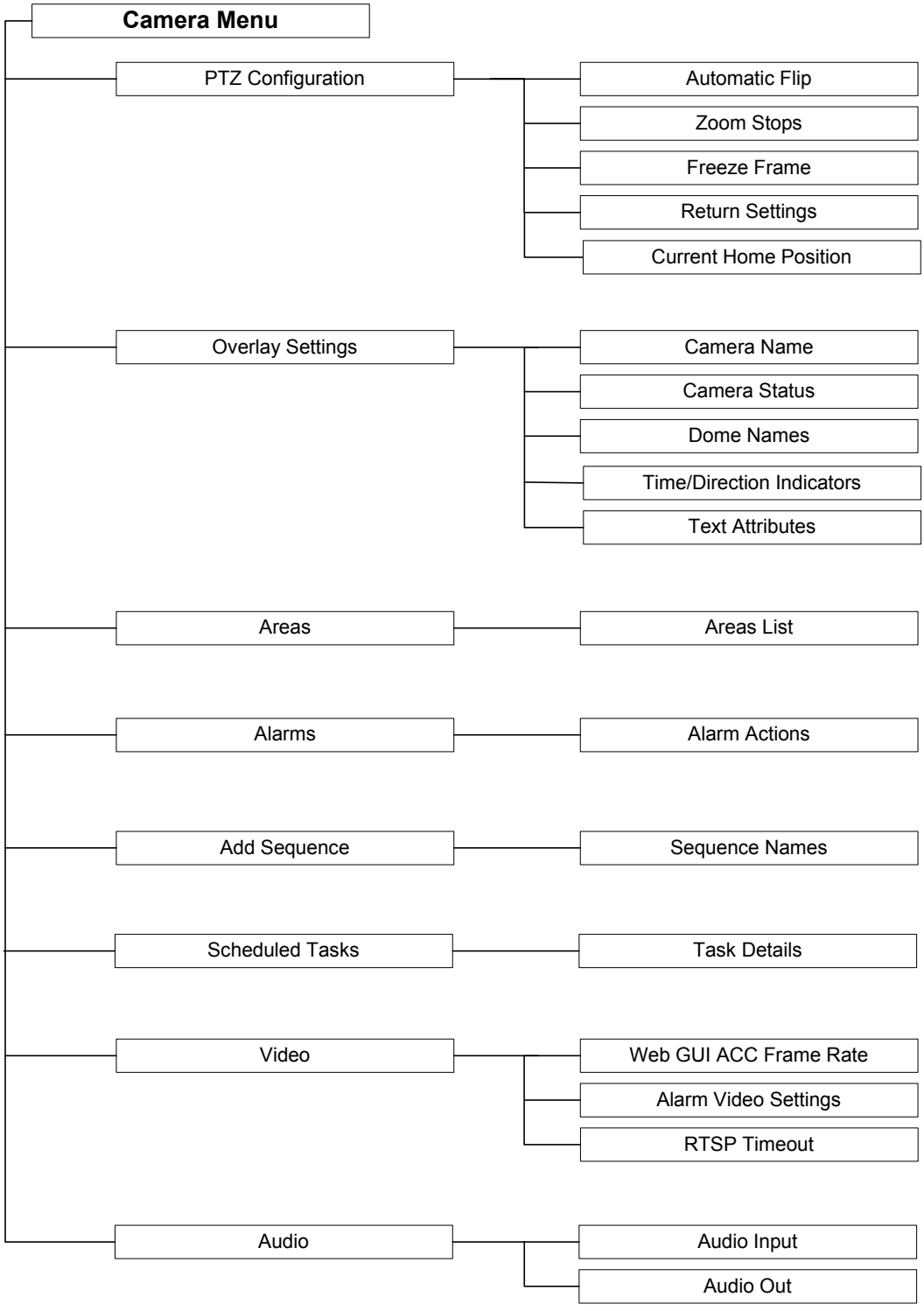
The site maps for the built in web configuration pages are detailed on the following pages. These have been divided into four sections using the main menu camera headings.

- Live Viewing Site Map
- Camera Site Map
- Networking Site Map
- Information Site Map

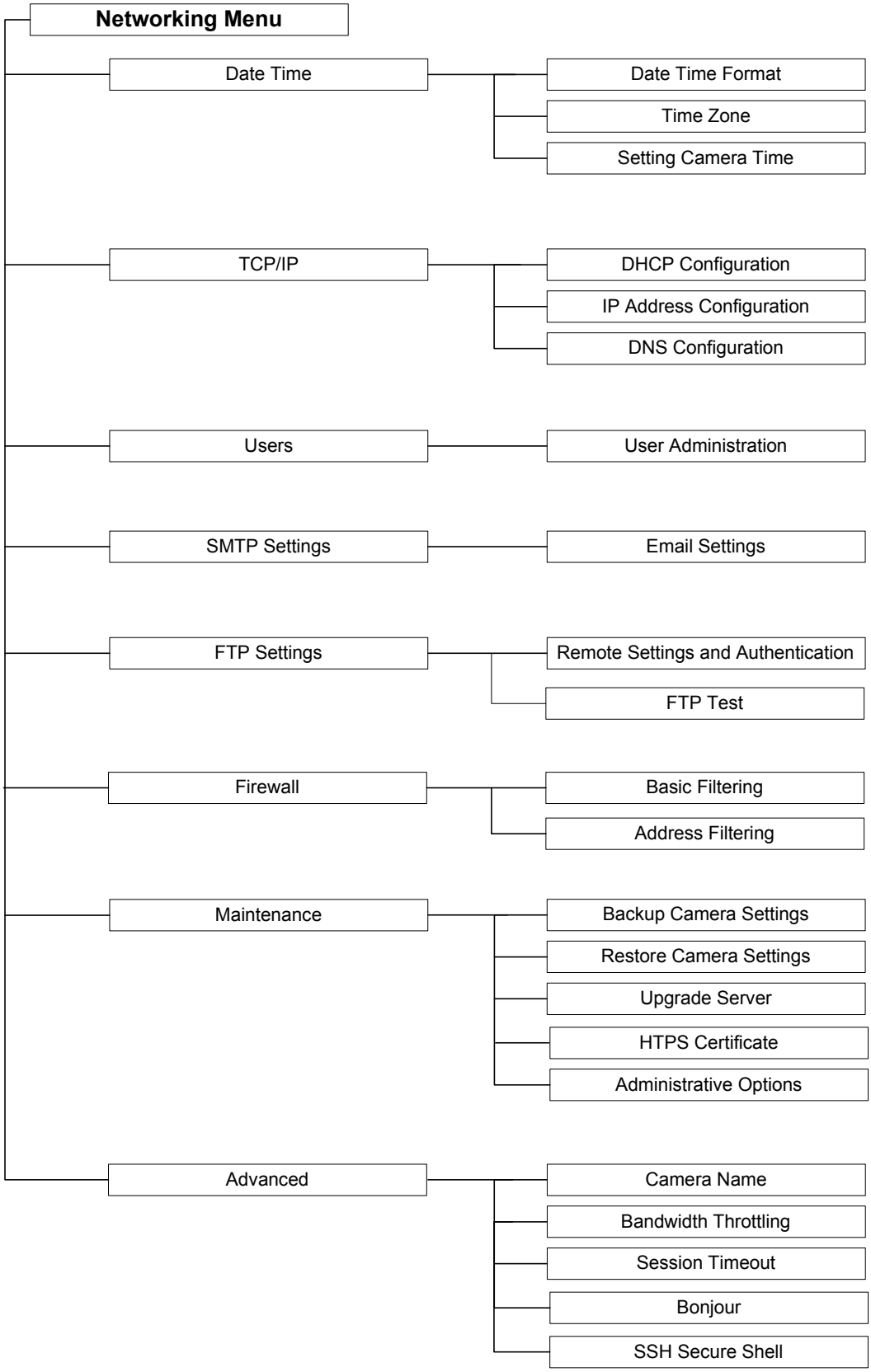
Live Viewing Site Map



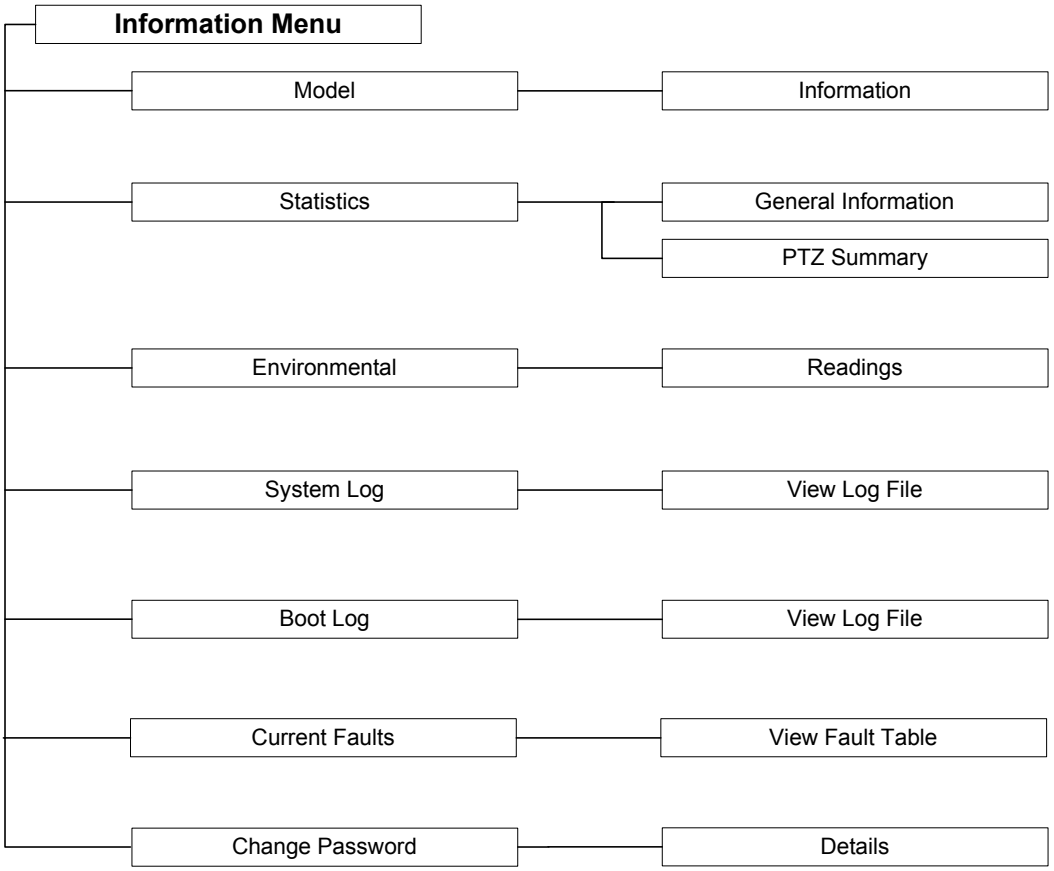
Camera Site Map



Networking Site Map



Information Site Map



END USER LICENSE AGREEMENT

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